SHOUT
SHARE
IT

The American Museum of Natural History

1869
THE LIBRARY

BIRDS

A MONTHLY SERIAL

ILLUSTRATED BY COLOR PHOTOGRAPHY

DESIGNED TO PROMOTE

KNOWLEDGE OF BIRD-LIFE

VOLUMES I AND II.

CHICAGO.
Nature Study Publishing Company.

QL821
1897

U -13508

COPYRIGHT, 1897

BY

NATURE STUDY PUBLISHING CO.
CHICAGO

INTRODUCTION.

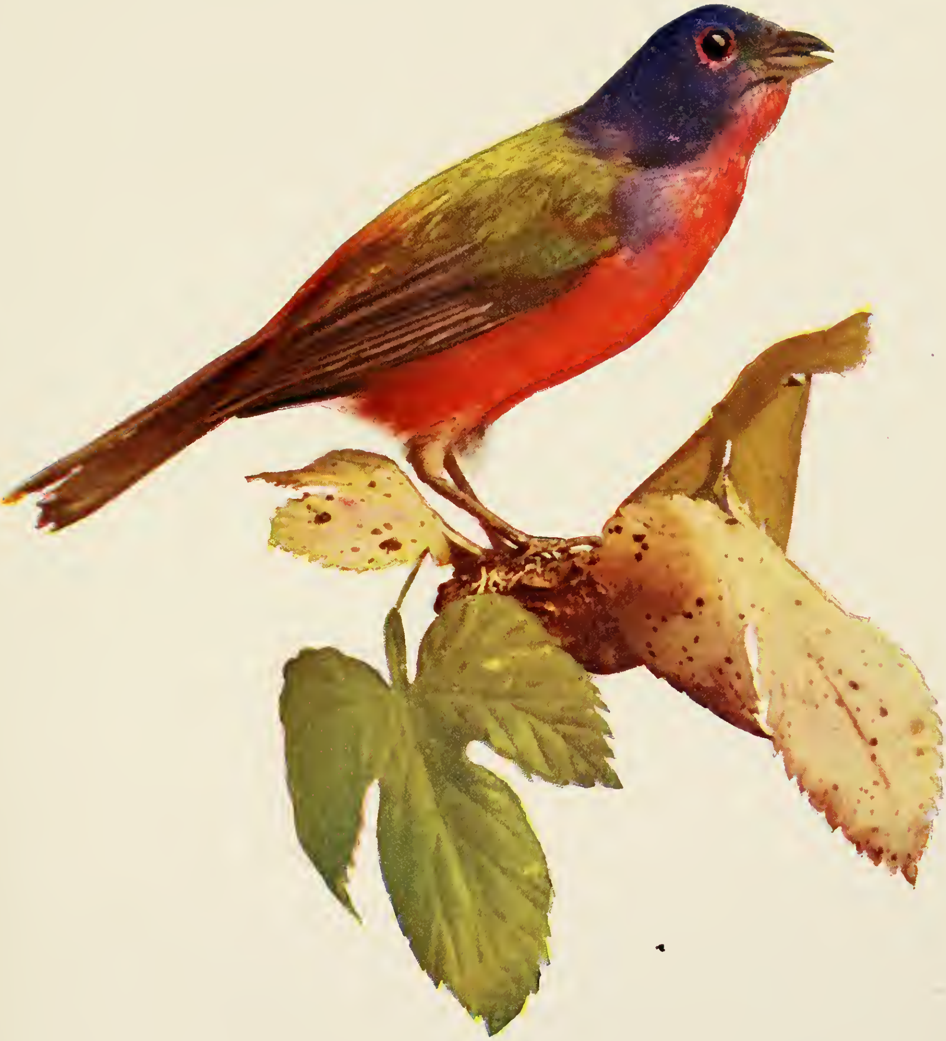
In these volumes lovers of birds will find presented for the [illegible] in their natural colors, one hundred and twenty plates of the most [illegible] attractive, and interesting specimens of North American and other birds. A new process of color photography has enabled the publishers to accomplish this wonderful result. Heretofore attempts have been made, with more or less success, by drawing, painting, lithography, etc., to produce satisfactory representations of our common birds, and ambitious efforts have been made, in many otherwise magnificent monographs, to show the graceful forms and brilliant plumage of the feathered families of South America, Africa, and the tropics, Australia, and elsewhere.

In BIRDS the object of the publishers, in the specimens thus far figured, has been attained. Subsequent volumes will disclose treasures of bird-life quite unimagined by the general reader. "The continuous woods where rolls the Oregon" have been explored, and their most gorgeous inhabitants will face the camera; the birds of finest feather—home residents—will be of the company; and foreigners of distinguished family and plumage, from far countries, will lend their presence, occasionally one or two of such so rare as to excite the surprise which the Peacock might cause, were it seen for the first time by the people of the west.

Birds will be presented, in fact, which will exemplify, for the feathered creation, the exquisite lines of Keats, differently applied, and will be as much of a surprise to our readers as to

> "——Some watcher of the skies
> When a new planet swims into his ken."

NATURE STUDY PUBLISHING COMPANY.



NONPAREIL.
LIFE SIZE.

THE NONPAREIL.

I am called the Nonpareil because there is no other bird equal to me.

I have many names. Some call me the "Painted Finch" or "Painted Bunting." Others call me "The Pope," because I wear a purple hood.

I live in a cage, eat seeds, and am very fond of flies and spiders.

Sometimes they let me out of the cage and I fly about the room and catch flies. I like to catch them while they are flying.

When I am tired I stop and sing. There is a vase of flowers in front of the mirror.

I fly to this vase where I can see myself in the glass. Then I sing as loud as I can. They like to hear me sing.

I take a bath every day and how I do make the water fly!

I used to live in the woods where there were many birds like me. We build our nests in bushes, hedges, and low trees. How happy we were.

My cage is pretty but I wish I could go back to my home in the woods.

See page 15.

"SWEET warblers of the sunny hours,
  Forever on the wing,
I love thee as I love the flowers,
  The sunlight and the spring.

They come like pleasant memories
  In summer's joyous time,
And sing their gushing melodies,
  As I would sing a rhyme.

In the green and quiet places,
  Where the golden sunlight falls,
We sit with smiling faces
  To list their silver calls.

And when their holy anthems
  Come pealing through the air,
Our hearts leap forth to meet them
  With a blessing and a prayer.

Amid the morning's fragrant dew,
  Amid the mists of even,
They warble on as if they drew
  Their music down from heaven.

How sweetly sounds each mellow note
  Beneath the moon's pale ray,
When dying zephyrs rise and float
  Like lovers' sighs away!"

THE RESPLENDENT TROGON.

A Letter to Litttle Boys and Girls of the United States.

Is it cold where you live, little boys and girls? It is not where I live. Don't you think my feathers grew in the bright sunshine?

My home is way down where the big oceans almost meet. The sun is almost straight overhead every noon.

I live in the woods, way back where the trees are tall and thick. I don't fly around much, but sit on a limb of a tree way up high.

Don't you think my red breast looks pretty among the green leaves?

When I see a fly or a berry I dart down after it. My long tail streams out behind like four ribbons. I wish you could see me. My tail never gets in the way.

Wouldn't you like to have me sit on your shoulder, little boy? You see my tail would reach almost to the ground.

If you went out into the street with me on your shoulder, I would call *whe-oo. whe-oo,* the way I do in the woods.

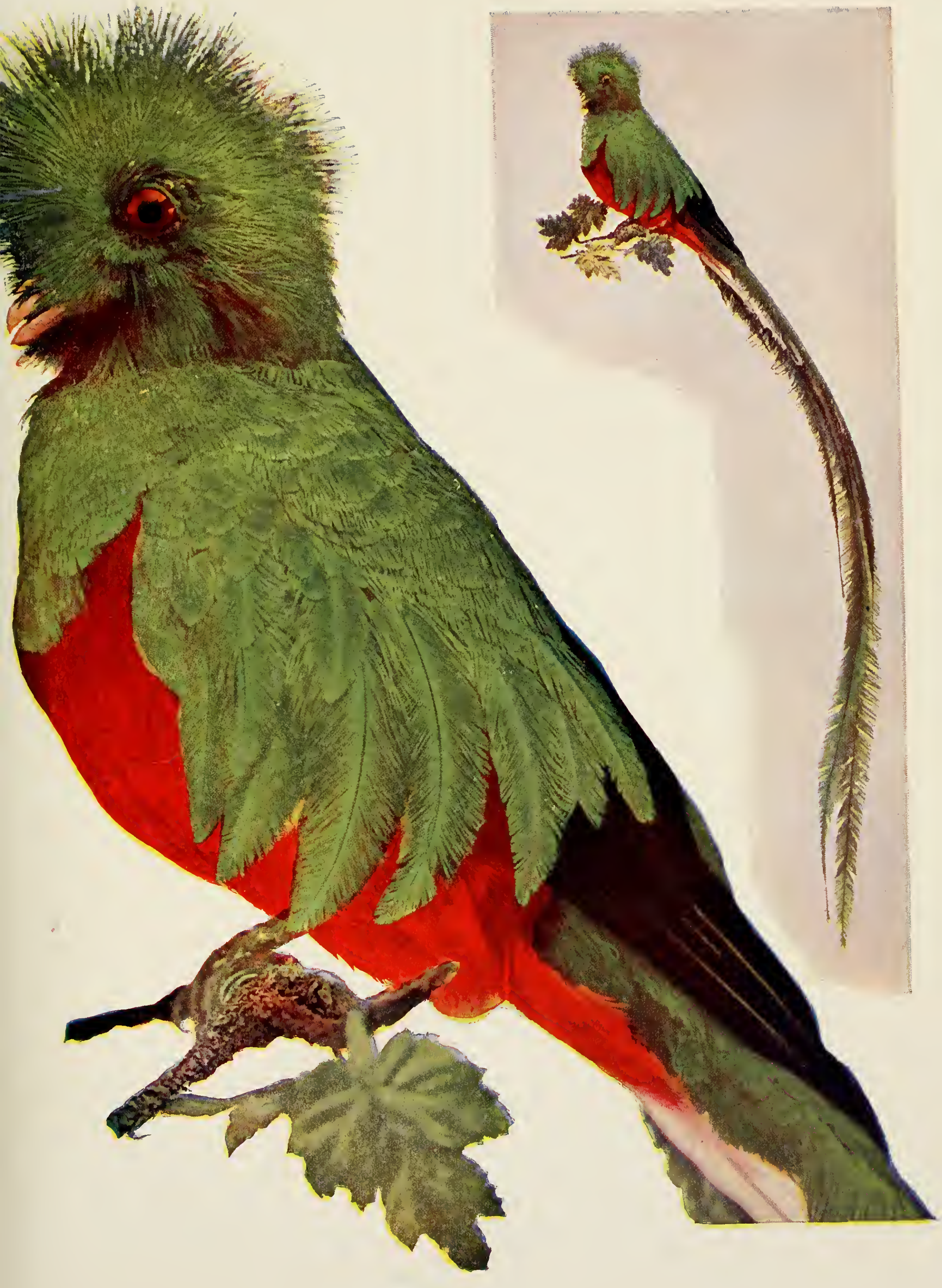
All the little boys and girls playing near would look around and say, "What is that noise?" Then they would see you and me and run up fast and say, "Where did you get that bird?"

The little girls would want to pull out my tail feathers to put around their hats. You would not let them, would you?

I have a mate. I think she is very nice. Her tail is not so long as mine. Would you like to see her too? She lays eggs every year, and sits on them till little birds hatch out. They are just like us, but they have to grow and get dressed in the pretty feathers like ours. They look like little dumplings when they come out of the eggs.

But they are all right. They get very hungry and we carry them lots of things to eat, so they can grow fast.

Your friend,
R. T.



RESPLENDENT TROGON.
⅞ Life-size.

THE RESPLENDENT TROGON.

RESPLENDENT Trogons are natives of Central America. There are fifty kinds, and this is the largest. A systematic account of the superb tribe has been given by Mr. Gould, the only naturalist who has made himself fully acquainted with them.

Of all birds there are few which excite so much admiration as the Resplendent Trogon.

The skin is so singularly thin that it has been not inaptly compared to wet blotting paper, and the plumage has so light a hold upon the skin that when the bird is shot the feathers are plentifully struck from their sockets by its fall and the blows which it receives from the branches as it comes to the ground.

Its eggs, of a pale bluish-green, were first procured by Mr. Robert Owen. Its chief home is in the mountains near Coban in Vera Paz, but it also inhabits forests in other parts of Guatemala at an elevation of from 6,000 to 9,000 feet.

From Mr. Salvin's account of his shooting in Vera Paz we extract the following hunting story:

"My companions are ahead and Filipe comes back to say that they have heard a quesal, (Resplendent Trogon). Of course, being anxious to watch as well as to shoot one of these birds myself, I immediately hurry to the spot. I have not to wait long. A distant clattering noise indicates that the bird is on the wing. He settles—a splendid male—on the bough of a tree not seventy yards from where we are hidden. It sits almost motionless on its perch, the body remaining in the same position, the head only moving from side to side. The tail does not hang quite perpendicularly, the angle between the true tail and the vertical being perhaps as much as fifteen or twenty degrees. The tail is occasionally jerked open and closed again, and now and then slightly raised, causing the long tail coverts to vibrate gracefully. I have not seen all. A ripe fruit catches the quesal's eye and he darts from his perch, plucks the berry, and returns to his former position. This is done with a degree of elegance that defies description. A low whistle from Capriano calls the bird near, and a moment afterward it is in my hand—the first quesal I have seen and shot."

The above anecdote is very beautiful and graphic, but we read the last sentence with pain. We wish to go on record with this our first number as being unreconciled to the *ruthless* killing of the birds. He who said, not a sparrow "shall fall on the ground without your Father," did not intend such birds to be killed, but to beautify the earth.

The cries of the quesal are various. They consist principally of a low note, *whe-oo*, *whe-oo*, which the bird repeats, whistling it softly at first, then gradually swelling it into a loud and not unmelodious cry. This is often succeeded by a long note, which begins low and after swelling dies away as it began. Other cries are harsh and discordant. The flight of the Trogon is rapid and straight. The long tail feathers, which never seem to be in the way, stream after him. The bird is never found except in forests of the loftiest trees, the lower branches of which, being high above the ground, seem to be its favorite resort. Its food consists principally of fruit, but occasionally a caterpillar is found in its stomach.

THE MANDARIN DUCK.

A Letter from China.

Quack! Quack! I got in just in time.

I came as fast as I could, as I was afraid of being whipped. You see I live in a boat with a great many other ducks.

My master and his family live in the boat too. Isn't that a funny place to live in?

We stay in all night. Waking up early in the morning, we cry Quack! Quack! until we wake the master.

He gets up and opens the gate for us and out we tumble into the water. We are in such a hurry that we fall over each other. We swim about awhile and then we go to shore for breakfast.

There are wet places near the shore where we find worms, grubs, and roots. When evening comes the master blows a whistle. Then we know it is time to come home.

We start as soon as we hear it, and hurry, because the last duck in gets a whipping. It does not hurt much but we do not like it, so we all try to get home first.

I have web feet, but I perch like other birds on the branches of the trees near the river.

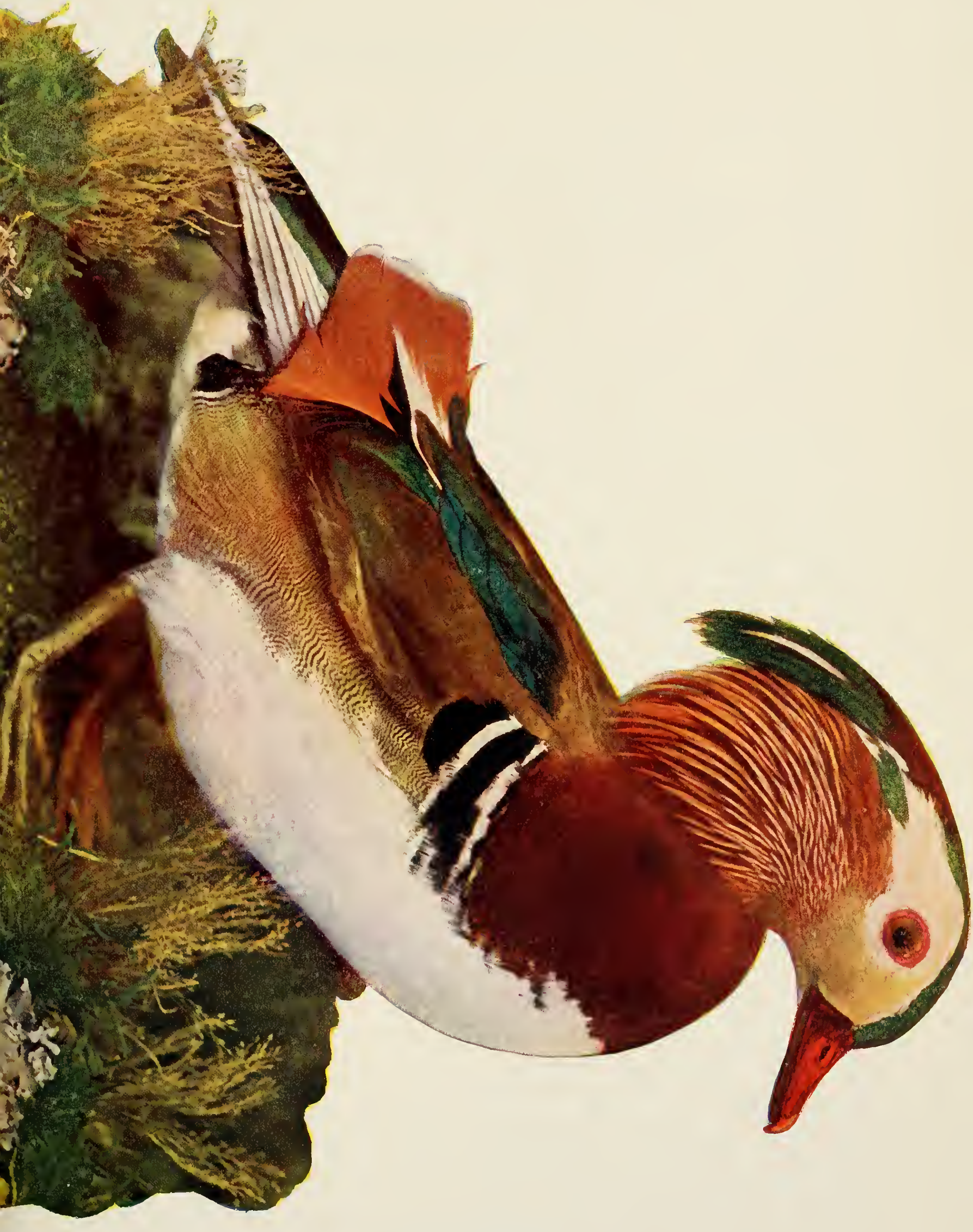
My feathers are beautiful in the sunlight. My wife always sits near me. Her dress is not like mine. It is brown and grey.

From May to August I lose my bright feathers, then I put on a dress like my wife's.

My master's family are Chinese, and they are very queer. They would not sell me for anything, as they would not like to have me leave China.

Sometimes a pair of us are put in a gay cage and carried to a wedding. After the wedding we are given to the bride and groom.

I hear the master's whistle again. He wants me to come in and go to bed. Quack! Quack! Good bye!



MANDARIN DUCK.
⅔ Life-size.

THE MANDARIN DUCK.

"A MORE magnificently clothed bird," says Wood, "than the male Chinese Mandarin Duck, can hardly be found, when in health and full nuptial plumage. They are natives of China and Japan, and are held in such high esteem by the Chinese that they can hardly be obtained at any price, the natives having a singular dislike to seeing the birds pass into the possession of Europeans."

Though web-footed, the birds have the power of perching and it is a curious sight to watch them on the branches of trees overhanging the pond in which they live, the male and female being always close together, the one gorgeous in purple, green, white, and chestnut, and the other soberly apparelled in brown and grey. This handsome plumage the male loses during four months of the year, from May to August, when he throws off his fine crest, his wing-fans, and all his brilliant colors, assuming the sober tinted dress of his mate. The Summer Duck of America bears a close resemblance to the Mandarin Duck, both in plumage and manners, and at certain times of the year is hardly to be distinguished from that bird.

The foreign duck has been successfully reared in Zoological Gardens, some being hatched under the parent bird and others under a domestic hen, the latter hatching the eggs three days in advance of the former.

"The Chinese," says Dr. Bennett, "highly esteem the Mardarin Duck, which exhibits, as they think, a most striking example of conjugal attachment and fidelity. A pair of them are frequently placed in a gaily decorated cage and carried in their marriage processions, to be presented to the bride and groom as worthy objects of emulation."

"I could more easily," wrote a friend of Dr. Bennett's in China to whom he had expressed his desire for a pair of these birds, "send you two live Mandarins than a pair of Mandarin Ducks."

Concerning their attachment and fidelity to one another, Dr. Bennett recites the following:

"Mr. Beale's aviary at Maceo one day was broken open and the male bird stolen from the side of its mate. She refused to be comforted, and, retiring to the farthest part of the aviary, sat disconsolate, rarely partaking of food, and giving no attention to her soiled and rumpled plumage. In vain did another handsome drake endeavor to console her for her loss. After some time the stolen bird was found in the quarters of a miserable Chinaman, and at once restored to its mate. As soon as he recognized his abode he began to flap his wings and quack vehemently. She heard his voice and almost quacked to screaming with ecstacy, both expressing their joy by crossing necks and quacking in concert. The next morning he fell upon the unfortunate drake who had made consolatory advances to his mate, pecked out his eyes and so injured him that the poor fellow died in the course of a few days."

According to Schrenck, this species appears in the countries watered by the Amoor about May, and departs again at the end of August; at this season it is always met with in small or large flocks, which are so extremely shy that they rarely come within gunshot. Whilst on the wing these parties crowd closely together in front, the birds in the rear occupying a comparatively free space.

THE GOLDEN PHEASANT

They call me the Golden Pheasant, because I have a golden crest. It is like a king's crown. Don't you think my dress is beautiful enough for a king?

See the large ruff around my neck. I can raise and lower it as I please.

I am a very large bird. I am fourteen inches tall and twenty-eight inches long. I can step right over your little robins and meadow larks and blue jays and not touch them.

Sometimes people get some of our eggs and put them under an old hen. By and by little pheasants hatch out, and the hen is very good to them. She watches over them and feeds them, but they do not wish to stay with her, they like their wild life. If they are not well fed they will fly away.

I have a wife. Her feathers are beginning to grow like mine. In a few years she will look as I do. We like to have our nests by a fallen tree.

THE well-known Chinese Pheasant, which we have named the Golden Pheasant, as well as its more sober-colored cousin, the Silver Pheasant, has its home in Eastern Asia.

China is pre-eminently the land of Pheasants; for, besides those just mentioned, several other species of the same family are found there. Japan comes next to China as a pheasant country and there are some in India.

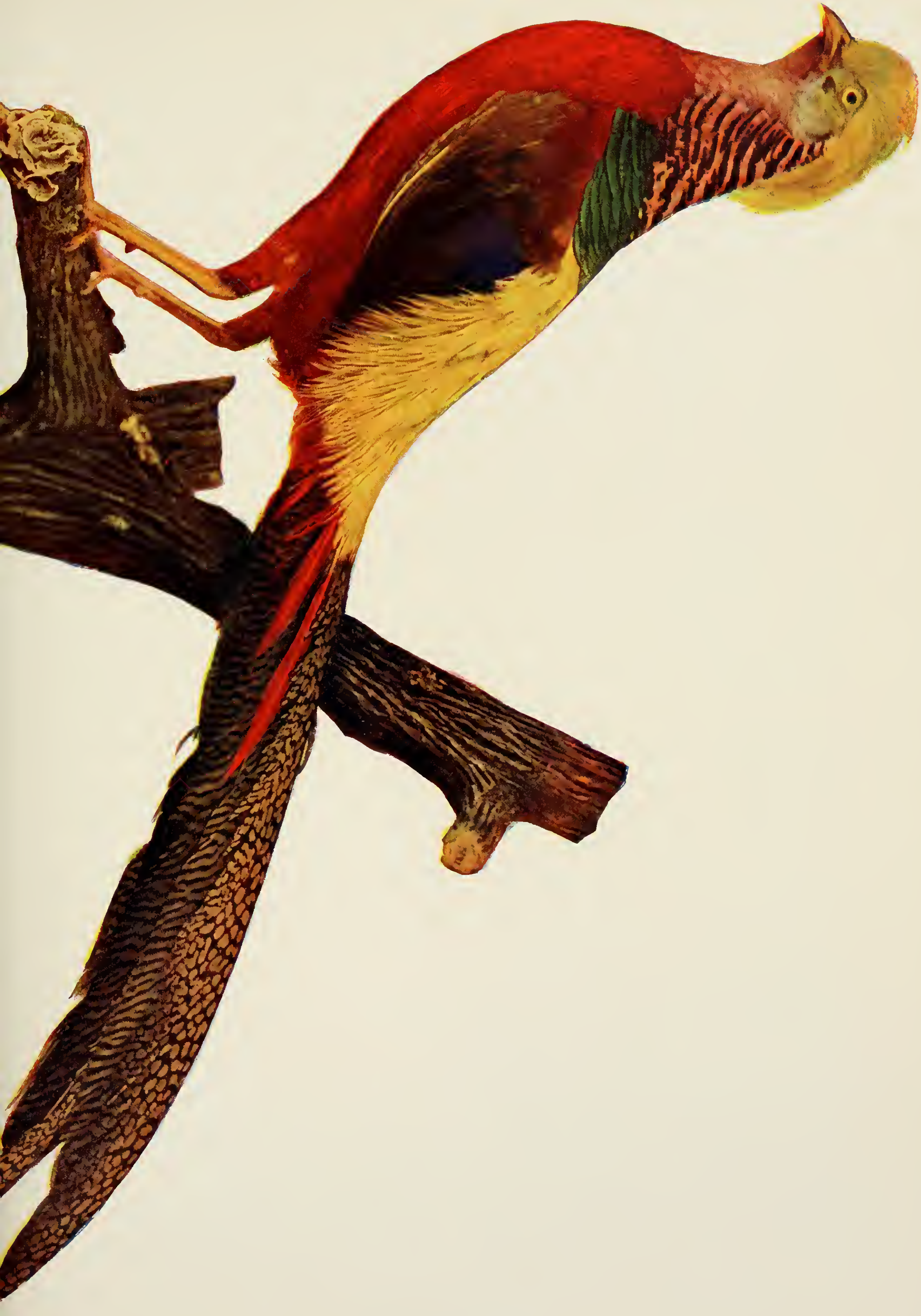
In China the Golden Pheasant is a great favorite, not only for its splendid plumage and elegant form, but for the excellence of its flesh, which is said to surpass even that of the common pheasant. It has been introduced into Europe, but is fitted only for the aviary.

For purposes of the table it is not likely to come into general use, as there are great difficulties in the way of breeding it in sufficient numbers, and one feels a natural repugnance to the killing of so beautiful a bird for the sake of eating it. The magnificent colors belong only to the male, the female being reddish brown, spotted and marked with a darker hue. The tail of the female is short. The statement is made, however, that some hens kept for six years by Lady Essex gradually assumed an attire like that of the males.

Fly-fishers highly esteem the crest and feathers on the back of the neck of the male, as many of the artificial baits owe their chief beauty to the Golden Pheasant.

According to Latham, it is called by the Chinese Keuki, or Keukee, a word which means gold flower fowl.

"A merry welcome to thee, glittering bird!
Lover of summer flowers and sunny things!
A night hath passed since my young buds have heard
The music of thy rainbow-colored wings—
Wings that flash spangles out where'er they quiver,
Like sunlight rushing o'er a river."



GOLDEN PHEASANT
11/28 Life-size.
Tail somewhat shortened.

THE NONPARIEL.

SO full of fight is this little bird, that the bird trappers take advantage of his disposition to make him a prisoner. They place a decoy bird on a cage trap in the attitude of defense, and when it is discovered by the bird an attack at once follows, and the fighter soon finds himself caught.

They are a great favorite for the cage, being preferred by many to the Canary. Whatever he may lack as a songster he more than makes up by his wonderful beauty. These birds are very easily tamed, the female, even in the wild state, being so gentle that she allows herself to be lifted from the nest. They are also called the *Painted Finch* or *Painted Bunting*. They are found in our Southern States and Mexico. They are very numerous in the State of Louisiana and especially about the City of New Orleans, where they are greatly admired by the French inhabitants, who, true to their native instincts, admire anything with gay colors. As the first name indicates, he has no equal, perhaps, among the songsters for beauty of dress. On account of this purple hood, he is called by the French *Le Pape*, meaning The Pope.

The bird makes its appearance in the Southern States the last of April and, during the breeding season, which lasts until July, two broods are raised. The nests are made of fine grass and rest in the crotches of twigs of the low bushes and hedges. The eggs have a dull or pearly-white ground and are marked with blotches and dots of purplish and reddish brown.

It is very pleasing to watch the numerous changes which the feathers undergo before the male bird attains his full beauty of color. The young birds of both sexes during the first season are of a fine olive green color on the upper parts and a pale yellow below. The female undergoes no material change in color except becoming darker as she grows older. The male, on the contrary, is three seasons in obtaining his full variety of colors. In the second season the blue begins to show on his head and the red also makes its appearance in spots on the breast. The third year he attains his full beauty.

Their favorite resorts are small thickets of low trees and bushes, and when singing they select the highest branches of the bush. They are passionately fond of flies and insects and also eat seeds and rice.

Thousands of these birds are trapped for the cage, and sold annually to our northern people and also in Europe. They are comparatively cheap, even in our northern bird markets, as most of them are exchanged for our Canaries and imported birds that cannot be sent directly to the south on account of climatic conditions.

Many a northern lady, while visiting the orange groves of Florida, becomes enchanted with the Nonpareil in his wild state, and some shrewd and wily negro, hearing her expressions of delight, easily procures one, and disposes of it to her at an extravagant price.

THE AUSTRALIAN GRASS PARRAKEET.

I am a Parrakeet. I belong to the Parrot family. A man bought me and brought me here.

It is not warm here, as it was where I came from. I almost froze coming over here.

I am not kept in a cage. I stay in the house and go about as I please.

There is a Pussy Cat in the house. Sometimes I ride on her back. I like that.

I used to live in the grass lands. It was very warm there. I ran among the thick grass blades, and sat on the stems and ate seeds.

I had a wife then. Her feathers were almost like mine. We never made nests. When we wanted a nest, we found a hole in a gum tree. I used to sing to my wife while she sat on the nest.

I can mock other birds. Sometimes I warble and chirp at the same time. Then it sounds like two birds singing. My tongue is short and thick, and this helps me to talk. But I have been talking too much. My tongue is getting tired.

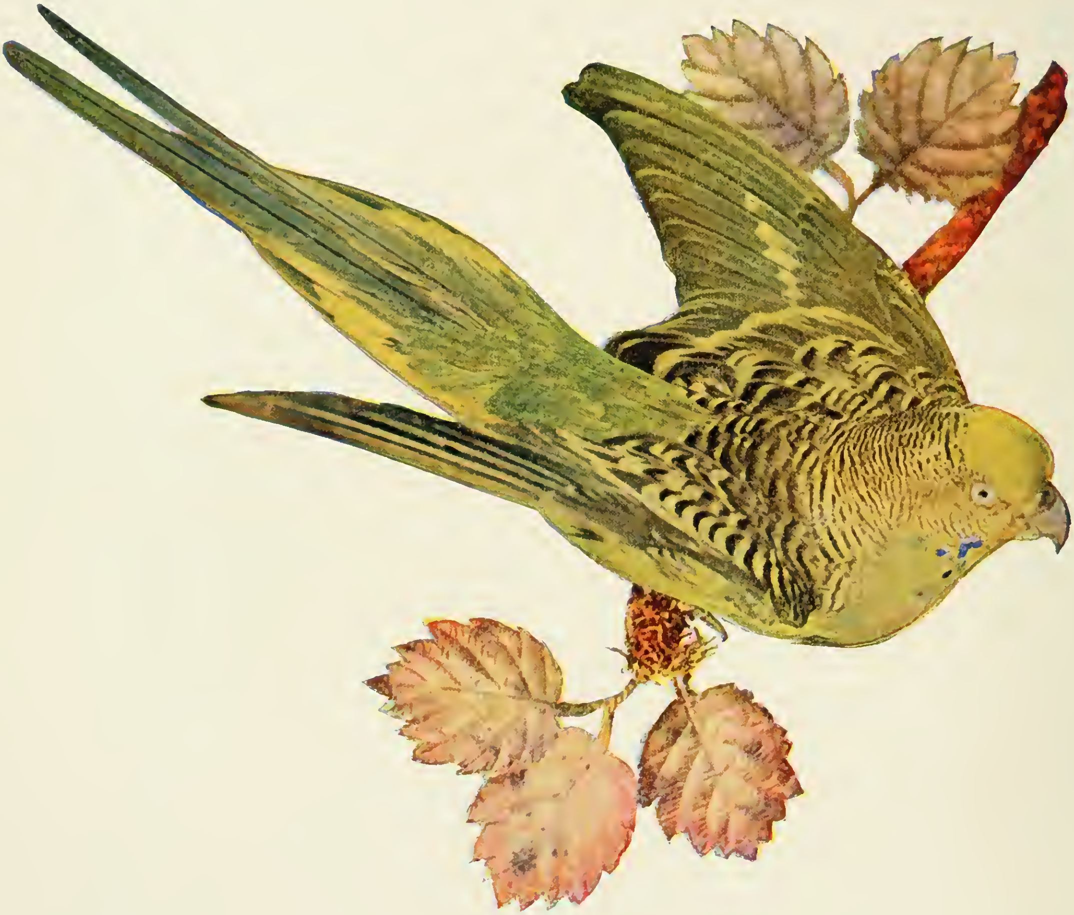
I think I'll have a ride on Pussy's back. Good bye.

PARRAKEETS have a great fondness for the grass lands, where they may be seen in great numbers, running amid the thick grass blades, clinging to their stems, or feeding on their seeds.

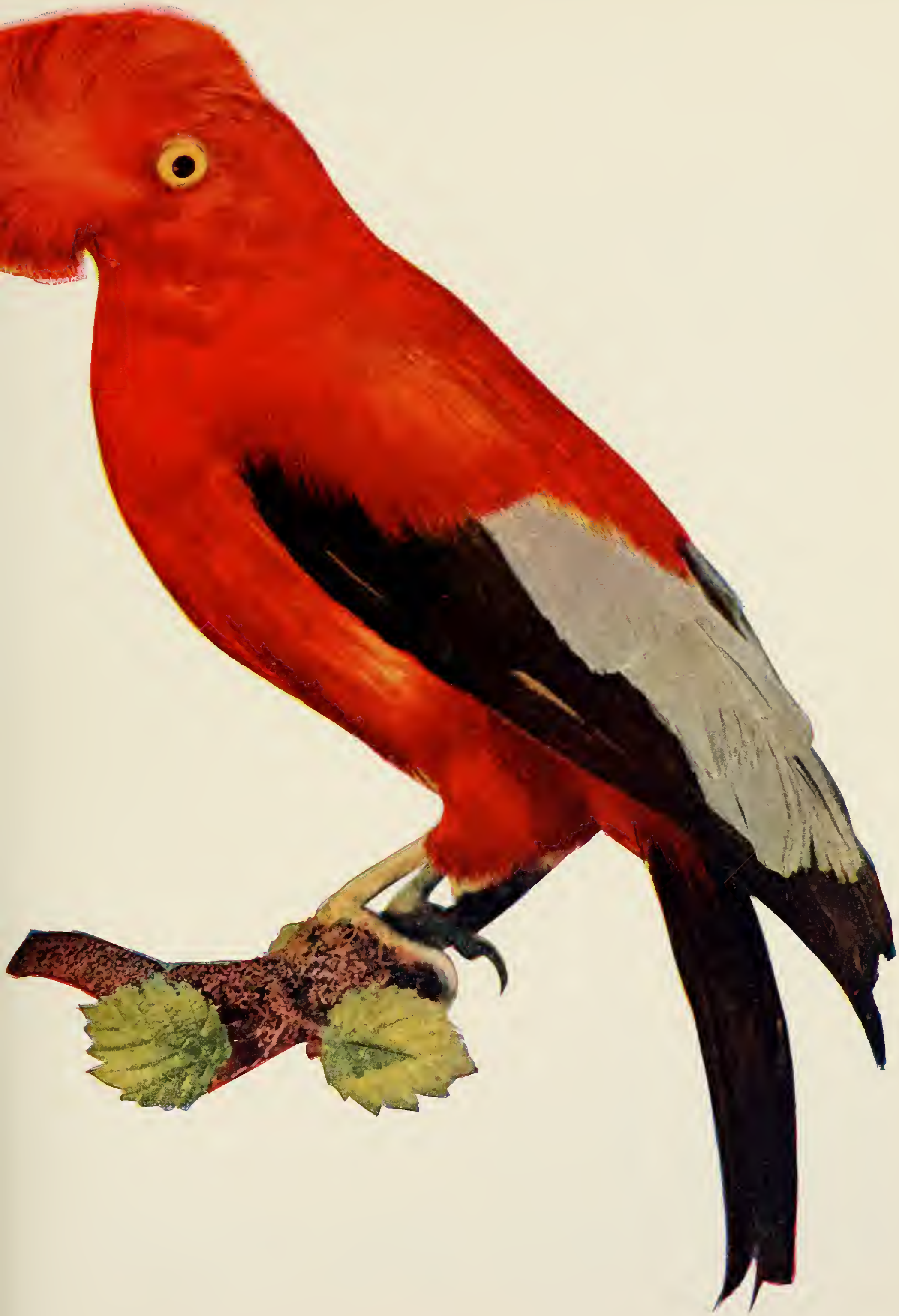
Grass seed is their constant food in their native country. In captivity they take well to canary seed, and what is remarkable, never pick food with their feet, as do other species of parrots, but always use their beaks. "They do not build a nest, but must be given a piece of wood with a rough hole in the middle, which they will fill to their liking, rejecting all soft lining of wool or cotton that you may furnish them."

Only the male sings, warbling nearly all day long, pushing his beak at times into his mate's ear as though to give her the full benefit of his song. The lady, however, does not seem to appreciate his efforts, but generally pecks him sharply in return.

A gentleman who brought a Parrakeet from Australia to England, says it suffered greatly from the cold and change of climate and was kept alive by a kind-hearted weather-beaten sailor, who kept it warm and comfortable in his bosom. It was not kept in a cage, but roamed at will about the room, enjoying greatly at times, a ride on the cat's back. At meals he perched upon his master's shoulder, picking the bits he liked from a plate set before him. If the weather was cold or chilly, he would pull himself up by his master's whiskers and warm his feet by standing on his bald head. He always announced his master's coming by a shrill call, and no matter what the hour of night, never failed to utter a note of welcome, although apparently asleep with his head tucked under his wing.



AUSTRALIAN GRASS PARRAKEET
Life-size



COCK-OF-THE-ROCK.
6/7 Life-size.

THE COCK OF THE ROCK.

THE Cock-of-the-Rock lives in Guiana. Its nest is found among the rocks. T. K Salmon says: "I once went to see the breeding place of the Cock-of-the-Rock; and a darker or wilder place I have never been in. Following up a mountain stream the gorge became gradually more enclosed and more rocky, till I arrived at the mouth of a cave with high rock on each side, and overshadowed by high trees, into which the sun never penetrated. All was wet and dark, and the only sound heard was the rushing of the water over the rocks. We had hardly become accustomed to the gloom when a nest was found, a dark bird stealing away from what seemed to be a lump of mud upon the face of the rock. This was a nest of the Cock-of-the-Rock, containing two eggs; it was built upon a projecting piece, the body being made of mud or clay, then a few sticks, and on the top lined with green moss. It was about five feet from the water. I did not see the male bird, and, indeed, I have rarely ever seen the male and female birds together, though I have seen both sexes in separate flocks."

The eggs are described as pale buff with various sized spots of shades from red-brown to pale lilac.

It is a solitary and wary bird, feeding before sunrise and after sunset and hiding through the day in sombre ravines.

Robert Schomburgh decribes its dance as follows:

"While traversing the mountains of Western Guiana we fell in with a pack of these splendid birds, which gave me the opportunity of being an eye witness of their dancing, an accomplishment which I had hitherto regarded as a fable. We cautiously approached their ballet ground and place of meeting, which lay some little distance from the road. The stage, if we may so call it, measured from four to five feet in diameter; every blade of grass had been removed and the ground was as smooth as if leveled by human hands. On this space we saw one of the birds dance and jump about, while the others evidently played the part of admiring spectators At one moment it expanded its wings, threw its head in the air, or spread out its tail like a peacock scratching the ground with its foot; all this took place with a sort of hopping gait, until tired, when on emitting a peculiar note, its place was immediately filled by another performer. In this manner the different birds went through their terpsichorean exercises, each retiring to its place among the spectators, who had settled on the low bushes near the theatre of operations. We counted ten males and two females in the flock. The noise of a breaking stick unfortunately raised an alarm, when the whole company of dancers immediately flew off."

"The Indians, who place great value on their skins, eagerly seek out their playing grounds, and armed with their blow-tubes and poisoned arrows, lie in wait for the dances. The hunter does not attempt to use his weapon until the company is quite engrossed in the performance, when the birds become so pre-occupied with their amusement that four or five are often killed before the survivors detect the danger and decamp."

THE RED BIRD OF PARADISE.

My home is on an island where it is very warm. I fly among the tall trees and eat fruit and insects.

See my beautiful feathers. The ladies like to wear them in their hats.

The feathers of my wife are brown, but she has no long tail feathers.

My wife thinks my plumes are very beautiful.

When we have a party, we go with our wives to a tall tree. We spread our beautiful plumes while our wives sit and watch us.

Sometimes a man finds our tree and builds a hut among the lower branches.

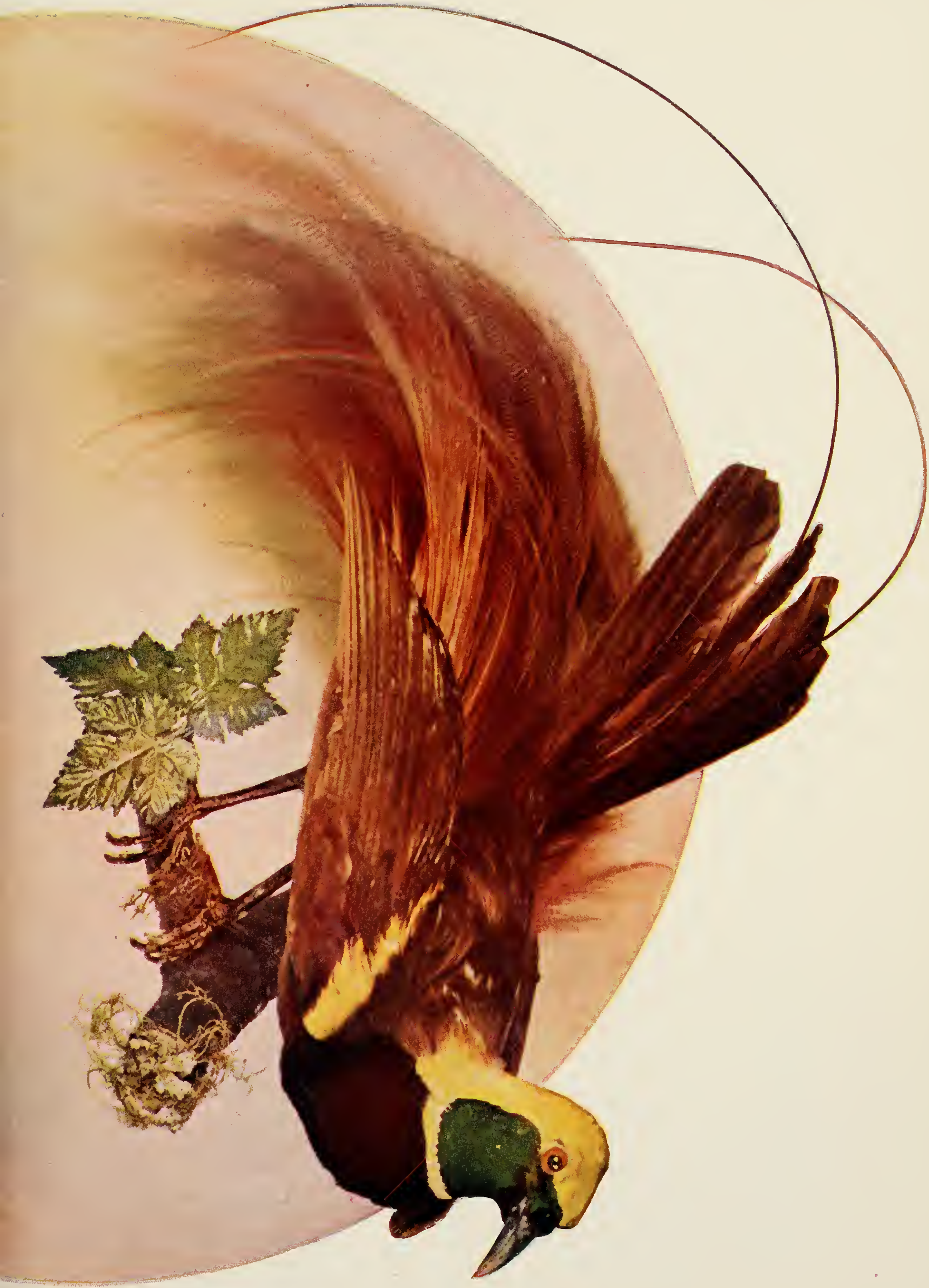
He hides in the hut and while we are spreading our feathers shoots at us.

The arrows are not sharp. They do not draw blood.

When they dry the skins they take off the feet and wings. This is why people used to think we had neither feet nor wings.

They also thought we lived on the dews of heaven and the honey of flowers. This is why we are called the Birds of Paradise.

"Upon its waving feathers poised in air,
Feathers, or rather clouds of golden down,
With streamers thrown luxuriantly out
In all the wantonness of winged wealth."



RED BIRD OF PARADISE.
$^4/_9$ Life-size.

THE RED BIRD OF PARADISE.

BIRDS of Paradise are found only in New Guinea and on the neighboring islands. The species presented here is found only on a few islands.

In former days very singular ideas prevailed concerning these birds and the most extravagant tales were told of the life they led in their native lands. The natives of New Guinea, in preparing their skins for exportation, had removed all traces of legs, so that it was popularly supposed they possessed none, and on account of their want of feet and their great beauty, were called the Birds of Paradise, retaining, it was thought, the forms they had borne in the Garden of Eden, living upon dew or ether, through which it was imagined they perpetually floated by the aid of their long cloud-like plumage.

Of one in confinement Dr. Bennett says: "I observed the bird, before eating a grasshopper, place the insect upon the perch, keep it firmly fixed by the claws, and, divesting it of the legs, wings, etc., devour it with the head always first. It rarely alights upon the ground, and so proud is the creature of its elegant dress that it never permits a soil to remain upon it, frequently spreading out its wings and feathers, regarding its splendid self in every direction."

The sounds uttered by this bird are very peculiar, resembling somewhat the cawing of the Raven, but change gradually to a varied scale in musical gradations, like *he*, *hi*, *ho*, *how!* He frequently raises his voice, sending forth notes of such power as to be heard at a long distance. These notes are *whack*, *whack*, uttered in a barking tone, the last being a low note in conclusion.

While creeping amongst the branches in search of insects, he utters a soft clucking note. During the entire day he flies incessantly from one tree to another, perching but a few moments, and concealing himself among the foliage at the least suspicion of danger.

In Bennett's "Wanderings" is an entertaining description of Mr. Beale's bird at Maceo. "This elegant bird," he says, "has a light, playful, and graceful manner, with an arch and impudent look, dances about when a visitor approaches the cage, and seems delighted at being made an object of admiration. It bathes twice daily, and after performing its ablutions throws its delicate feathers up nearly over its head, the quills of which have a peculiar structure, enabling the bird to effect this object. To watch this bird make its toilet is one of the most interesting sights of nature; the vanity which inspires its every movement, the rapturous delight with which it views its enchanting self, its arch look when demanding the spectator's admiration, are all pardonable in a delicate creature so richly embellished, so neat and cleanly, so fastidious in its tastes, so scrupulously exact in its observances, and so winning in all its ways."

Says a traveler in New Guinea: "As we were drawing near a small grove of teak-trees, our eyes were dazzled with a sight more beautiful than any I had yet beheld. It was that of a Bird of Paradise moving through the bright light of the morning sun. I now saw that the birds must be seen alive in their native forests, in order to fully comprehend the poetic beauty of the words Birds of Paradise. They seem the inhabitants of a fairer world than ours, things that have wandered in some way from their home, and found the earth to show us something of the beauty of worlds beyond."

THE YELLOW THROATED TOUCAN.

I am a Toucan and I live in a very warm country.

See my handsome black coat and my yellow vest.

My toes are like a parrot's, two in front and two behind.

They help me to hold to the limbs.

Look at my large beak. It looks heavy but it is not, as it is filled with air cells. These make it very light. Do you like my blue eyes?

My nest is very hard to find. If I tell you where it is, you will not take the eggs, will you? It is in a hollow limb of a very high tree.

I am very fond of fruit, and for this reason the people on the plantations do not like me very well.

I can fly very fast, but I cannot get along so well on the ground. I keep my feet far apart and hop.

I like to sit in the top of the tallest trees. Then I am not afraid. Nothing can reach me there but a rifle ball.

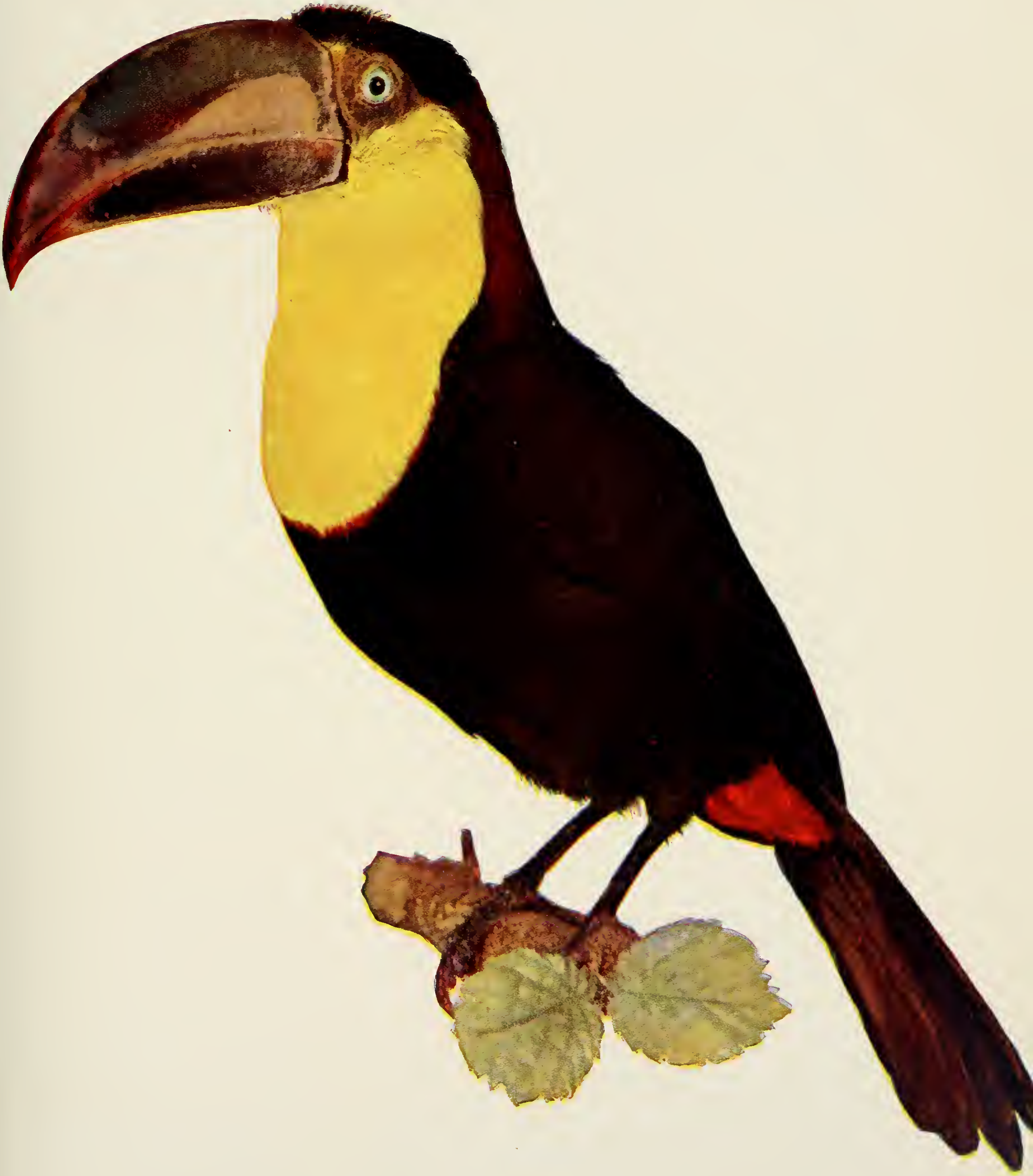
I do not like the owl, he is so ugly. When we find an owl we get in a circle around him and snap our great beaks, and jerk our tails up and down and scream. He is very much afraid of us.

The people where I live like our yellow breasts. They wear them on their heads, and also put them on the ends of their bows.

We sometimes sit together in a tree and snap our beaks and shout. This is why we have been called "Preacher Birds."

We can scream so loud that we may be heard a mile away. Our song is "Tucano! Tucano!"

I think it is a pretty song, but the people do not like it very much.



YELLOW THROATED TOUCAN.
½ Life-size.

THE YELLOW THROATED TOUCAN.

THE Toucans are a numerous race of South American birds, at once recognizable by the prodigious size of their beaks and by the richness of their plumage. "These birds are very common," says Prince Von Wied, "in all parts of the extrensive forests of the Brazils and are killed for the table in large numbers during the cool seasons. Their eggs are deposited in the hollow limbs and holes of the colossal trees, so common in the tropical forests, but their nests are very difficult to find. The egg is said to be white. They are very fond of fruit, oranges, guavas and plantains, and when these fruits are ripe make sad havoc among the neighboring plantations. In return for these depredations the planter eats their flesh, which is very delicate."

The flight of these birds is easy and graceful, sweeping with facility over the loftiest trees of their native forests, their strangely developed bills being no encumbrance to them, replete as they are with a tissue of air-filled cells rendering them very light and even buoyant.

On the ground they get along with a rather awkward hopping movement, their legs being kept widely apart. In ascending a tree they do not climb but mount from one branch to another with a series of jumps, ascending to the tops of the very loftiest trees, safe from every missle except a rifle ball. They have a habit of sitting on the branches in flocks, lifting their bills, clattering them together, and shouting hoarsely all the while, from which custom the natives call them Preacher-birds. Sometimes the whole party, including the sentinel, set up a simultaneous yell so deafeningly loud that it can be heard a mile. They are very loquacious birds and are often discovered through their perpetual chattering. Their cry resembles the word "Tucano," which has given origin to the peculiar name.

When settling itself to sleep, the Toucan packs itself up in a very systematic manner, supporting its huge beak by resting it on its back, and tucking it completely among the feathers, while it doubles its tail across its back just as if it moved on hinges. So completely is the large bill hidden among the feathers, that hardly a trace of it is visible in spite of its great size and bright color, so that the bird when sleeping looks like a great ball of loose feathers.

Sir R. Owen concludes that the large beak is of service in masticating food compensating for the absence of any grinding structures in the intestinal tract.

Says a naturalist: "We turned into a gloomy forest and for some time saw nothing but a huge brown moth, which looked almost like a bat on the wing. Suddenly we heard high upon the trees a short shrieking sort of noise ending in a hiss, and our guide became excited and said, "Toucan!" The birds were very wary and made off. They are much in quest and often shot at. At last we caught sight of a pair, but they were at the top of such a high tree that they were out of range. Presently, when I had about lost hope, I heard loud calls, and three birds came and settled in a low bush in the middle of the path. I shot one and it proved to be a very large toucan. The bird was not quite dead when I picked it up, and it bit me severely with its huge bill."

THE RED RUMPED TANAGER.

I have just been singing my morning song, and I wish you could have heard it. I think you would have liked it.

I always sing very early in the morning. I sing because I am happy, and the people like to hear me.

My home is near a small stream, where there are low woods and underbrush along its banks.

There is an old dead tree there, and just before the sun is up I fly to this tree.

I sit on one of the branches and sing for about half an hour. Then I fly away to get my breakfast.

I am very fond of fruit. Bananas grow where I live, and I like them best of all.

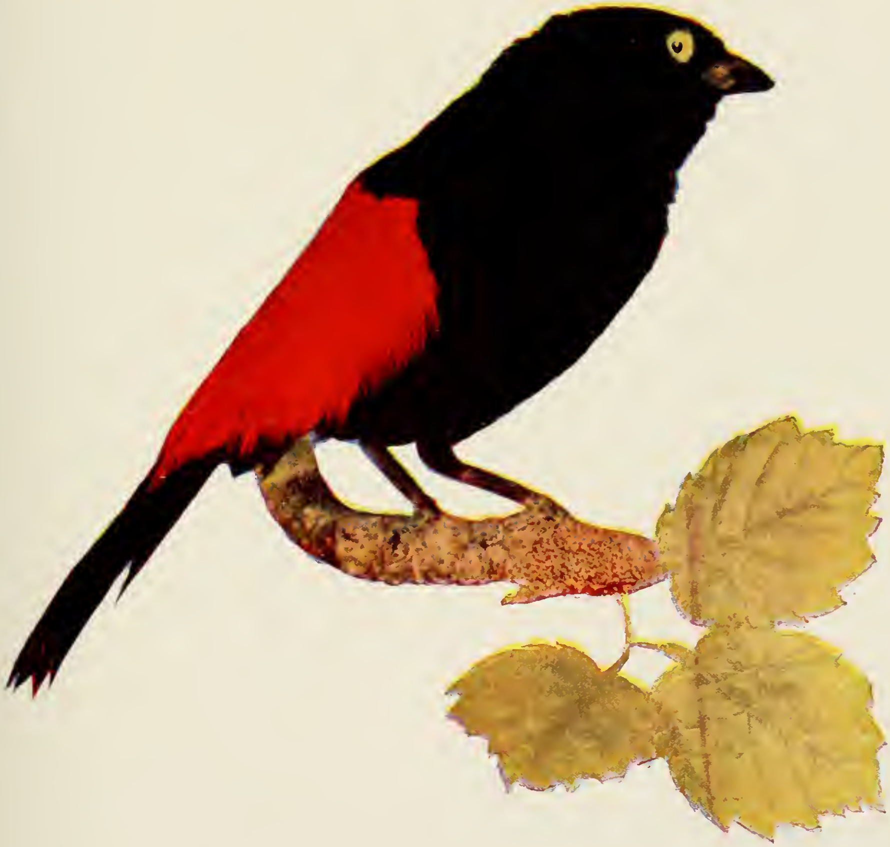
I eat insects, and sometimes I fly to the rice fields and swing on the stalks and eat rice.

The people say I do much harm to the rice, but I do not see why it is wrong for me to eat it, for I think there is enough for all.

I must go now and get my breakfast. If you ever come to see me I will sing to you.

I will show you my wife, too. She looks just like me. Be sure to get up very early. If you do not, you will be too late for my song.

"Birds, Birds! ye are beautiful things,
With your earth-treading feet and your cloud-cleaving wings.
Where shall man wander, and where shall he dwell—
Beautiful birds—that ye come not as well?
Ye have nests on the mountain, all rugged and stark,
Ye have nests in the forest, all tangled and dark;
Ye build and ye brood 'neath the cottagers' eaves,
And ye sleep on the sod, 'mid the bonnie green leaves;
Ye hide in the heather, ye lurk in the brake,
Ye dine in the sweet flags that shadow the lake;
Ye skim where the stream parts the orchard decked land,
Ye dance where the foam sweeps the desolate strand."



RED RUMPED TANAGER.
Life-size.

THE RED RUMPED TANAGER.

AN American family, the Tanagers are mostly birds of very brilliant plumage. There are 300 species, a few being tropical birds. They are found in British and French Guiana, living in the latter country in open spots of dwellings and feeding on bananas and other fruits. They are also said to do much harm in the rice fields.

In "The Auk," of July, 1893, Mr. George K. Cherrie, of the Field Museum, says of the Red-Rumped Tanager.

"During my stay at Boruca and Palmar, (the last of February) the breeding season was at its height, and I observed many of the Costa Rica Red-Rumps nesting. In almost every instance where possible I collected both parents of the nests, and in the majority of cases found the males wearing the same dress as the females. In a few instances the male was in mottled plumage, evidently just assuming the adult phase, and in a lesser number of examples the male was in fully adult plumage—velvety black and crimson red. From the above it is clear that the males begin to breed before they attain fully adult plumage, and that they retain the dress of the female until, at least, the beginning of the second year.

"While on this trip I had many proofs that, in spite of its rich plumage, and being a bird of the tropics, it is well worthy to hold a place of honor among the song birds. And if the bird chooses an early hour and a secluded spot for expressing its happiness, the melody is none the less delightful. At the little village of Buenos Aires, on the Rio Grande of Terraba, I heard the song more frequently than at any other point. Close by the ranch house at which we were staying, there is a small stream bordered by low woods and underbrush, that formed a favorite resort for the birds. Just below the ranch is a convenient spot where we took our morning bath. I was always there just as the day was breaking. On the opposite bank was a small open space in the brush occupied by the limbs of a dead tree. On one of these branches, and always the same one, was the spot chosen by a Red-rump to pour forth his morning song. Some mornings I found him busy with his music when I arrived, and again he would be a few minutes behind me. Sometimes he would come from one direction, sometimes from another, but he always alighted at the same spot and then lost no time in commencing his song. While singing, the body was swayed to and fro, much after the manner of a canary while singing. The song would last for perhaps half an hour, and then away the singer would go. I have not enough musical ability to describe the song, but will say that often I remained standing quietly for a long time, only that I might listen to the music."

THE GOLDEN ORIOLE.

WE find the Golden Oriole in America only. According to Mr. Nuttall, it is migratory, appearing in considerable numbers in West Florida about the middle of March. It is a good songster, and in a state of captivity imitates various tunes.

This beautiful bird feeds on fruits and insects, and its nest is constructed of blades of grass, wool, hair, fine strings, and various vegetable fibers, which are so curiously interwoven as to confine and sustain each other. The nest is usually suspended from a forked and slender branch, in shape like a deep basin and generally lined with fine feathers.

"On arriving at their breeding locality they appear full of life and activity, darting incessantly through the lofty branches of the tallest trees, appearing and vanishing restlessly, flashing at intervals into sight from amidst the tender waving foliage, and seem like living gems intended to decorate the verdant garments of the fresh clad forest."

It is said these birds are so attached to their young that the female has been taken and conveyed on her eggs, upon which with resolute and fatal instinct she remained faithfully sitting until she expired.

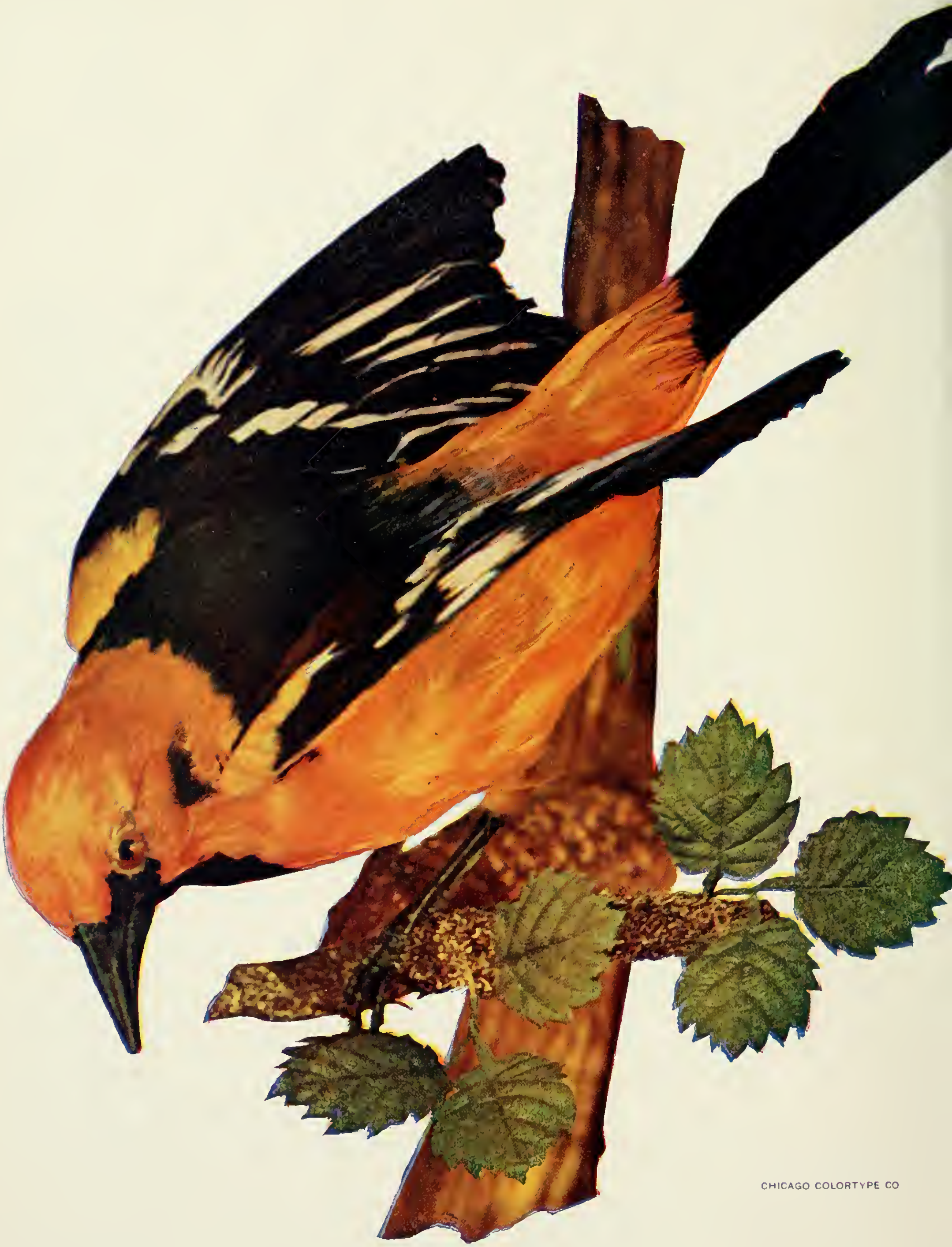
An Indiana gentleman relates the following story:

"When I was a boy living in the hilly country of Southern Indiana, I remember very vividly the nesting of a pair of fine Orioles. There stood in the barn yard a large and tall sugar tree with limbs within six or eight feet of the ground.

"At about thirty feet above the ground I discovered evidences of an Oriole's nest. A few days later I noticed they had done considerably more work, and that they were using horse hair, wool and fine strings. This second visit seemed to create consternation in the minds of the birds, who made a great deal of noise, apparently trying to frighten me away. I went to the barn and got a bunch of horse hair and some wool, and hung it on limbs near the nest. Then climbing up higher, I concealed myself where I could watch the work. In less than five minutes they were using the materials and chatted with evident pleasure over the abundant supply at hand.

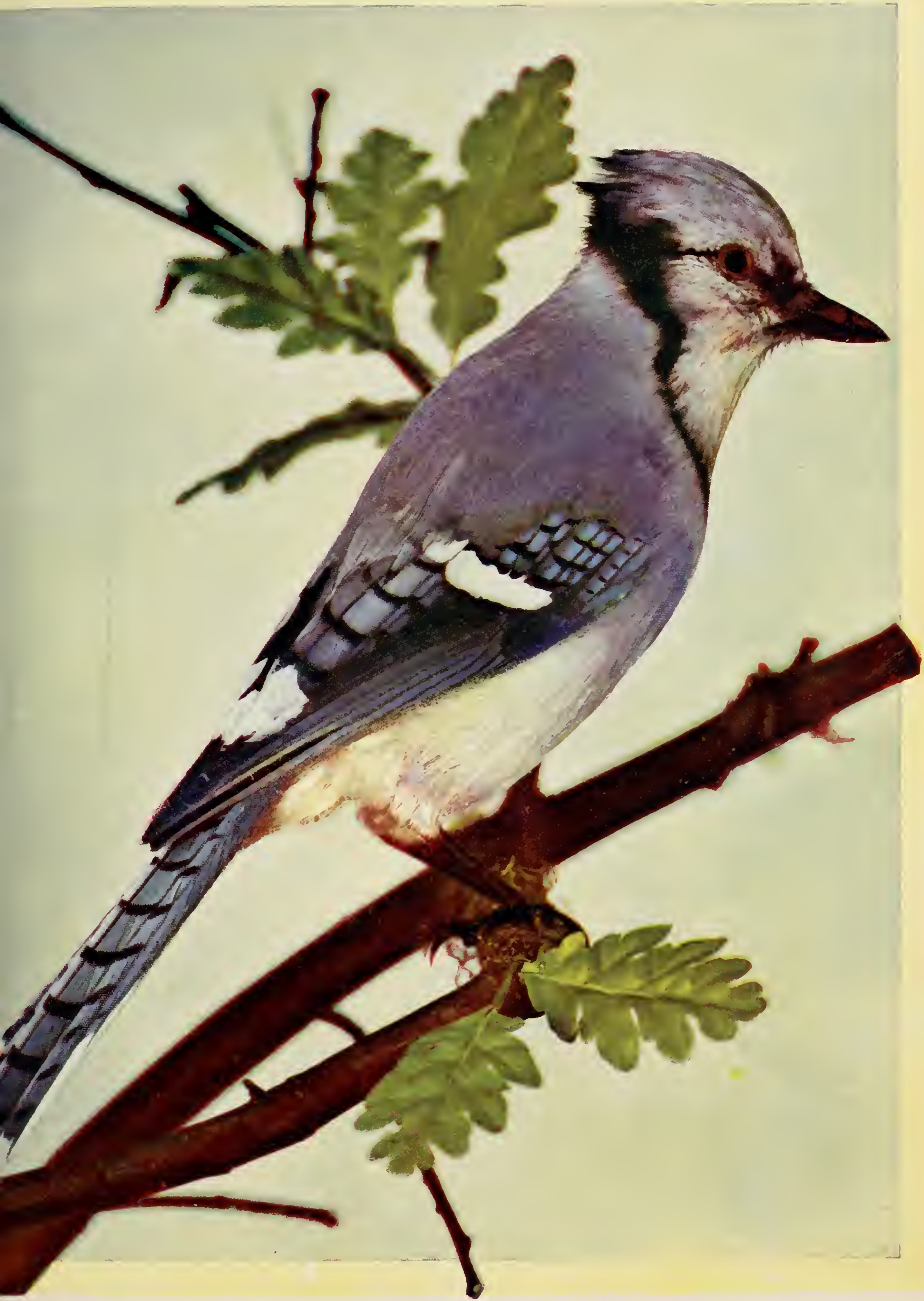
"They appeared to have some knowledge of spinning, as they would take a horse hair and seemingly wrap it with wool before placing it in position on the nest.

"I visited these birds almost daily, and shortly after the nest was completed I noticed five little speckled eggs in it. The female was so attached to the nest that I often rubbed her on the back and even lifted her to look at the eggs."



CHICAGO COLORTYPE CO

GOLDEN ORIOLE.
Life-size.



AMERICAN BLUE JAY.
$\frac{5}{6}$ Life-size.

THE BLUE JAY.

DURING about three-fourths of the year the American Jay is an extremely tame, noisy and even obstrusive bird in its habits. As the breeding season approaches he suddenly becomes silent, preparing the nest in the most secluded parts of his native forests, and exercising all his cunning to keep it concealed. He is omniverous but is especially fond of eggs and young birds. The Jay may be regarded as eminently injurious though in spring he consumes a number of insects to atone for his sins of stealing fruit and berries in autumn. He is a professional nest robber, and other birds are as watchful of him as is a mother of her babe. He glides through the foliage of the trees so swiftly and noiselessly that his presence is scarcely suspected until he has committed some depredation. The Robin is his most wary foe, and when the Jay is found near his nest will pursue him and drive him from the neighborhood. He is as brave as he is active, however, and dashes boldly in pursuit of his more plainly attired neighbors who venture to intrude upon his domain.

The Jay has a curious antipathy toward the owl, perching on trees above it and keeping up a continual screeching. Some years ago an Ohio gentleman was presented with a magnificent specimen of the horned owl, which he kept for a time in a large tin cage. In favorable weather the cage was set out of doors, when it would soon be surrounded by Jays, much in the manner described of the Toucan, and an incessant screeching followed, to which the owl appeared indifferent. They would venture near enough to steal a portion of his food, the bars of his cage being sufficiently wide apart to admit them. On one occasion, however, he caught the tail of a Jay in his claws and left the tormentor without his proud appendage.

The Jay remains with us throughout the year. He is one of the wildest of our birds, the shyest of man, although seeing him most. He makes no regular migrations at certain seasons, but, unless disturbed, will live out his life close to his favorite haunts. His wings show him to be unfitted for extended flight.

Jays are most easily discovered in the morning about sunrise on the tops of young live oaks. Their notes are varied. Later in the day it is more difficult to find them, as they are more silent, and not so much on the tree tops as among the bushes.

The Jays breed in woods, forests, orchards, preferring old and very shady trees, placing their nests in the center against the body, or at the bifurcation of large limbs. The nest is formed of twigs and roots; the eggs are from four to six.

THE BLUE JAY.

Something glorious, something gay,
Flits and flashes this-a-way!
'Thwart the hemlock's dusky shade,
Rich in color full displayed,
Swiftly vivid as a flame—
Blue as heaven and white as snow—
Doth this lovely creature go.
What may be his dainty name?
"Only this"—the people say—
"Saucy, chattering, scolding Jay!"

THE SWALLOW-TAILED INDIAN ROLLER.

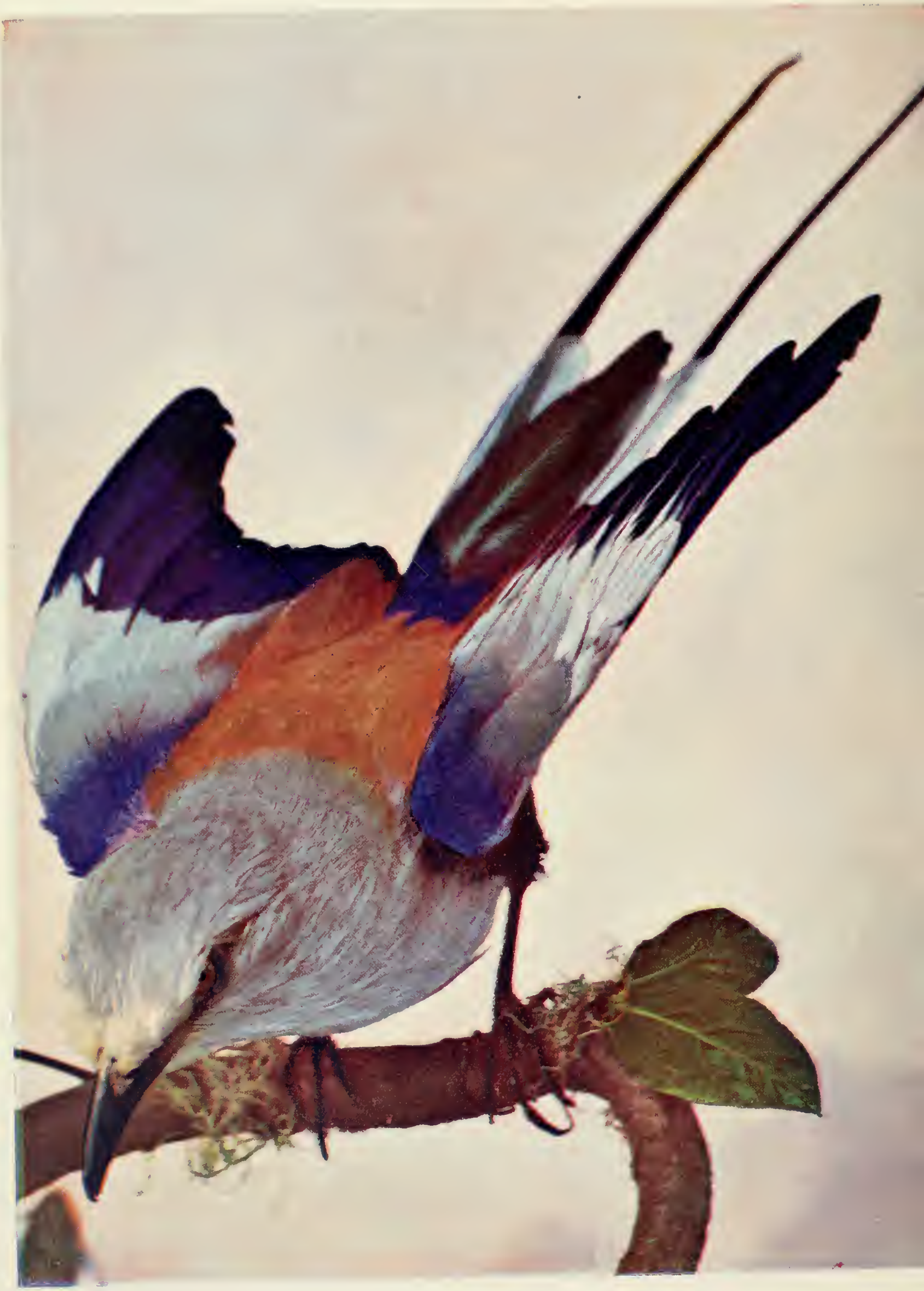
SWALLOW-TAILED Indian Rollers are natives of North-eastern Africa and Senegambia, and also the interior of the Niger district. The bird is so called from its way of occasionally rolling or turning over in its flight, somewhat after the fashion of a tumbler pigeon. A traveller in describing the habits of the Roller family, says:

"On the 12th of April I reached Jericho alone, and remained there in solitude for several days, during which time I had many opportunities of observing the grotesque habits of the Roller. For several successive evenings, great flocks of Rollers mustered shortly before sunset on some dona trees near the fountain, with all the noise but without the decorum of Rooks. After a volley of discordant screams, from the sound of which it derives its Arabic name of "schurkrak," a few birds would start from their perches and commence overhead a series of somersaults. In a moment or two they would be followed by the whole flock, and these gambols would be repeated for a dozen times or more.

Everywhere it takes its perch on some conspicuous branch or on the top of a rock, where it can see and be seen. The bare tops of the fig trees, before they put forth their leaves, are in the cultivated terraces, a particularly favorite resort. In the barren Ghor I have often watched it perched unconcernedly on a knot of gravel or marl in the plain, watching apparently for the emergence of beetles from the sand. Elsewhere I have not seen it settle on the ground.

Like Europeans in the East, it can make itself happy without chairs and tables in the desert, but prefers a comfortable easy chair when it is to be found. Its nest I have seen in ruins, in holes in rocks, in burrows, in steep sand cliffs, but far more generally in hollow trees. The colony in the Wady Kelt used burrows excavated by themselves, and many a hole did they relinquish, owing to the difficulty of working it. So cunningly were the nests placed under a crumbling, treacherous ledge, overhanging a chasm of perhaps one or two hundred feet, that we were completely foiled in our siege. We obtained a nest of six eggs, quite fresh, in a hollow tree in Bashan, near Gadara, on the 6th of May.

The total length of the Roller is about twelve inches. The Swallow-tailed Indian Roller, of which we present a specimen, differs from the Europeon Roller only in having the outer tail feathers elongated to an extent of several inches."



SWALLOW-TAILED INDIAN ROLLER.
3/5 Life-size.

THE RED HEADED WOODPECKER.

PERHAPS no bird in North America is more universally known than the Red Headed Woodpecker. He is found in all parts of the United States and is sometimes called, for short, by the significant name of Red-Head. His tri-colored plumage, red, white and black, glossed with steel blue, is so striking and characteristic, and his predatory habits in the orchards and corn-fields, and fondness for hovering along the fences, so very notorious, that almost every child is acquainted with the Red Headed Woodpecker. In the immediate neighborhood of large cities, where the old timber is chiefly cut down, he is not so frequently found. Wherever there is a deadening, however, you will find him, and in the dead tops and limbs of high trees he makes his home. Towards the mountains, particularly in the vicinity of creeks and rivers, these birds are extremely numerous, especially in the latter end of summer. It is interesting to hear them rattling on the dead leaves of trees or see them on the roadside fences, where they flit from stake to stake. We remember a tremendous and quite alarming and afterwards ludicrous rattling by one of them on some loose tin roofing on a neighbor's house. This occurred so often that the owner, to secure peace, had the roof repaired.

They love the wild cherries, the earliest and sweetest apples, for, as is said of him, " he is so excellent a connoisseur in fruit, that whenever an apple or pear is found broached by him, it is sure to be among the ripest and best flavored. When alarmed he seizes a capital one by striking his open bill into it, and bears it off to the woods." He eats the rich, succulent, milky young corn with voracity. He is of a gay and frolicsome disposition, and half a dozen of the fraternity are frequently seen diving and vociferating around the high dead limbs of some large trees, pursuing and playing with each other, and amusing the passerby with their gambols. He is a comical fellow, too, prying around at you from the bole of a tree or from his nesting hole therein.

Though a lover of fruit, he does more good than injury. Insects are his natural food, and form at least two thirds of his subsistence. He devours the destructive insects that penetrate the bark and body of a tree to deposit their eggs and larvae.

About the middle of May, he begins to construct his nest, which is formed in the body of large limbs of trees, taking in no material but smoothing it within to the proper shape and size. The female lays six eggs, of a pure white. The young appear about the first of June. About the middle of September the Red Heads begin to migrate to warmer climates, travelling at night time in an irregular way like a disbanded army and stopping for rest and food through the day.

The black snake is the deadly foe of the Red Head, frequently entering his nest, feeding upon the young, and remaining for days in possession.

" The eager school-boy, after hazarding his neck to reach the Woodpecker's hole, at the triumphant moment when he thinks the nestlings his own, strips his arm, launches it down into the cavity, and grasping what he conceives to be the callow young, starts with horror at the sight of a hideous snake, almost drops from his giddy pinnacle, and retreats down the tree with terror and precipitation."

THE WOODPECKER.

The Drummer Bird.

My dear girls and boys:

The man who told me to keep still and look pleasant while he took my picture said I might write you a letter to send with it. You say I always keep on the other side of the tree from you. That is because someone has told you that I spoil trees, and I am afraid that you will want to punish me for it. I do not spoil trees. The trees like to have me come to visit them, for I eat the insects that are killing them. Shall I tell you how I do this?

I cling to the tree with my strong claws so sharply hooked. The pointed feathers of my tail are stiff enough to help hold me against the bark. Then my breast bone is quite flat, so that I may press close to the tree. When I am all ready you hear my r-r-rap—just like a rattle. My head goes as quickly as if it were moved by a spring. Such a strong, sharp bill makes the chips fly! The tiny tunnel I dig just reaches the insect.

Then I thrust out my long tongue. It has a sharp, horny tip, and has barbs on it too. Very tiny insects stick to a liquid like glue that covers my tongue. I suppose I must tell you that I like a taste of the ripest fruit and grain. Don't you think I earn a little when I work so hard keeping the trees healthy?

I must tell you about the deep tunnel my mate and I cut out of a tree. It is just wide enough for us to slip into. It is not straight down, but bent, so that the rain cannot get to the bottom. There we make a nest of little chips for our five white eggs.

I should like to tell you one of the stories that some boys and girls tell about my red head. You will find it on another page of the book. Now I must fly away to peck for more bugs.

Your loving friend,

WOODPECKER.

RED-HEADED WOODPECKER
Life-size.

MEXICAN MOT MOT.

MOT MOTS are peculiar to the new world, being found from Mexico throughout the whole of Central America and the South American continent. The general plumage is green, and the majority of the species have a large racket at the end of the center tail feathers, formed by the bird itself.

The Houton, (so called from his note,) according to Waterson, ranks high in beauty among the birds of Demerara. This beautiful creature seems to suppose that its beauty can be increased by trimming its tail, which undergoes the same operation as one's hair in a barber shop, using its own beak, which is serrated, in lieu of a pair of scissors. As soon as its tail is fully grown, he begins about an inch from the extremity of the two longest feathers in it and cuts away the web on both sides of the shaft, making a gap about an inch long. Both male and female wear their tails in this manner, which gives them a remarkable appearance among all other birds.

To observe this bird in his native haunts, one must be in the forest at dawn. He shuns the society of man. The thick and gloomy forests are preferred by the Houton. In those far extending wilds, about day-break, you hear him call in distinct and melancholy tone, “Houton, Houton!” An observer says, “Move cautiously to the place from which the sound proceeds, and you will see him sitting in the underwood, about a couple of yards from the ground, his tail moving up and down every time he articulates “Houton!”

The Mot Mot lives on insects and berries found among the underwood, and very rarely is seen in the lofty trees. He makes no nest, but rears his young in a hole in the sand, generally on the side of a hill.

Mr. Osbert Salvin tells this curious anecdote: “Some years ago the Zoological Society possessed a specimen which lived in one of the large cages of the parrot house by itself. I have a very distinct recollection of the bird, for I used every time I saw it to cheer it up a bit by whistling such of its notes as I had picked up in the forests of America. The bird always seemed to appreciate this attention, for although it never replied, it became at once animated, hopped about the cage, and swung its tail from side to side like the pendulum of a clock. For a long time its tail had perfect spatules, but toward the end of its life I noticed that the median feathers were no longer trimmed with such precision, and on looking at its beak I noticed that from some cause or other it did not close properly, gaped slightly at the tip, and had thus become unfitted for removing the vanes of the feathers”

KING PARROT OR KING LORY.

LORY is the name of certain birds, mostly from the Moluccas and New Guinea, which are remarkable for their bright scarlet or crimson coloring, though also applied to some others in which the plumage is chiefly green. Much interest has been excited by the discovery of Dr. A. B. Meyer that the birds of this genus having a red plumage are the females of those wearing green feathers. For a time there was much difference of opinion on this subject, but the assertion is now generally admitted.

They are called "brush-tongued" Parrots. The color of the first plumage of the young is still unsettled. This bird is a favorite among bird fanciers, is readily tamed, and is of an affectionate nature. It can be taught to speak very creditably, and is very fond of attracting the attention of strangers and receiving the caresses of those whom it likes.

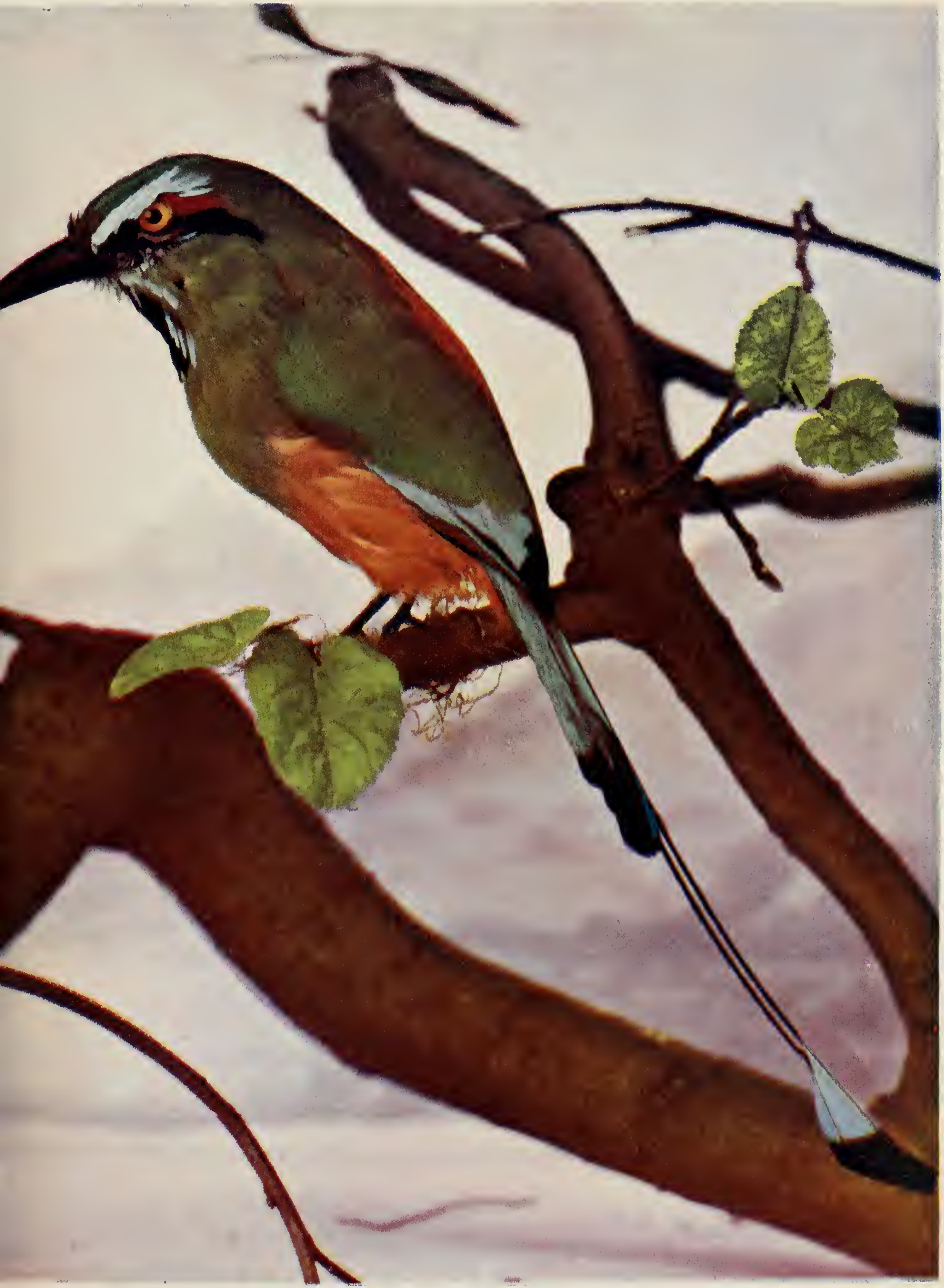
There are few things a parrot prefers to nuts and the stones of various fruits. Wood says he once succeeded in obtaining the affections of a Parisian Parrot, solely through the medium of peach stones which he always saved for the bird and for which it regularly began to gabble as soon as it saw him coming. "When taken freshly from the peach," he says, "the stones are very acceptable to the parrot, who turns them over, chuckling all the while to show his satisfaction, and picking all the soft parts from the deep indentations in the stone." He used to crack the stone before giving it to the bird, when his delight knew no bounds. They are fond of hot condiments, cayenne pepper or the capsicum pod. If a bird be ailing, a capsicum will often set it right again.

The parrot is one of the hardiest of birds when well cared for and will live to a great age. Some of these birds have been known to attain an age of seventy years, and one seen by Vaillant had reached the patriarchal age of ninety three. At sixty its memory began to fail, at sixty-five the moult became very irregular and the tail changed to yellow. At ninety it was a very decrepit creature, almost blind and quite silent, having forgotten its former abundant stock of words.

A gentleman once had for many years a parrot of seemingly rare intelligence. It was his custom during the summer to hang the parrot's cage in front of his shop in a country village, where the bird would talk and laugh and cry, and condole with itself. Dogs were his special aversion and on occasions when he had food to spare, he would drop it out of the cage and whistle long and loud for them When the dogs had assembled to his satisfaction he would suddenly scream in the fiercest accents, "Get out, dogs!" and when they had scattered in alarm his enjoyment of it was demonstrative. This parrot's vocabulary, however, was not the most refined, his master having equipped him with certain piratical idioms.

According to authority, the parrot owner will find the health of his pet improved and its happiness promoted by giving it, every now and then, a small log or branch on which the mosses and lichens are still growing. Meat, fish, and other similar articles of diet are given with evil effects.

It is impossible for anyone who has only seen these birds in a cage or small inclosure to conceive what must be the gorgeous appearance of a flock, either in full flight, and performing their various evolutions, under a vertical sun, or sporting among the superb foliage of a tropical forest which, without these, and other brilliant tenants, would present only a solitude of luxuriant vegetation.



MEXICAN MOT MOT.

⅔ Life-size

THE AMERICAN ROBIN.

The Bird of the Morning.

Yes, my dear readers, I am the bird of the morning. Very few of you rise early enough to hear my first song. By the time you are awake our little ones have had their breakfast, Mrs. Robin and I have had our morning bath and we are all ready to greet you with our morning song.

I wonder if any of you have seen our nest and can tell the color of the eggs that Mrs. Robin lays. Some time I will let you peep into the nest and see them, but of course you will not touch them.

I wonder, too, if you know any of my cousins—the Mocking bird, the Cat bird or the Brown Thrush—I think I shall ask them to have their pictures taken soon and talk to you about our gay times.

Did you ever see one of my cousins on the ground? I don't believe you can tell how I move about. Some of you may say I run, and some of you may say I hop, and others of you may say I do both. Well, I'll tell you how to find out. Just watch me and see. My little friends up north won't be able to see me though until next month, as I do not dare leave the warm south until Jack Frost leaves the ground so I can find worms to eat.

I shall be about the first bird to visit you next month and I want you to watch for me. When I do come it will be to stay a long time, for I shall be the last to leave you. Just think, the first to come and last to leave. Don't you think we ought to be great friends? Let us get better acquainted when next we meet. Your friend,

Robin.

How do the robins build their nest?
Robin Red Breast told me,
First a wisp of yellow hay
In a pretty round they lay;
Then some shreds of downy floss,
Feathers too, and bits of moss,
Woven with a sweet, sweet song,
This way, that way, and across:
That's what Robin told me.

Where do the robins hide their nest?
Robin Red Breast told me,
Up among the leaves so deep,
Where the sunbeams rarely creep,
Long before the winds are cold,
Long before the leaves are gold
Bright-eyed stars will peep and see
Baby Robins—one, two, three:
That's what Robin told me.

THE AMERICAN ROBIN.

"Come, sweetest of the feathered throng."

OUR American Robin must not be confounded with the English Robin Redbreast, although both bear the same name. It is the latter bird in whose praise so much has been written in fable and song. The American Robin belongs to the Thrush family; the Mocking bird, Cat-bird and Brown Thrush, or Thrasher, being other familiar children. In this family, bird organization reaches its highest development. This bird is larger than his English cousin the Redbreast and many think has a finer note than any other of the Thrush family.

The Robin courts the society of man, following close upon the plow and the spade and often becoming quite tame and domestic. It feeds for a month or two on strawberries and cherries, but generally on worms and insects picked out of the ground. It destroys the larvae of many insects in the soil and is a positive blessing to man, designed by the Creator for ornament and pleasure, and use in protecting vegetation. John Burroughs, the bird lover, says it is the most native and democratic of our birds.

It is widely diffused over the country, migrating to milder climates in the Winter. We have heard him in the early dawn on Nantucket Island welcoming the coming day, in the valleys of the Great and the Little Miami, in the parks of Chicago, and on the plains of Kansas, his song ever cheering and friendly. It is one of the earliest heralds of Spring, coming as early as March or April, and is one of the latest birds to leave us in Autumn. Its song is a welcome prelude to the general concert of Summer.

"When Robin Redbreast sings,
We think on budding Springs."

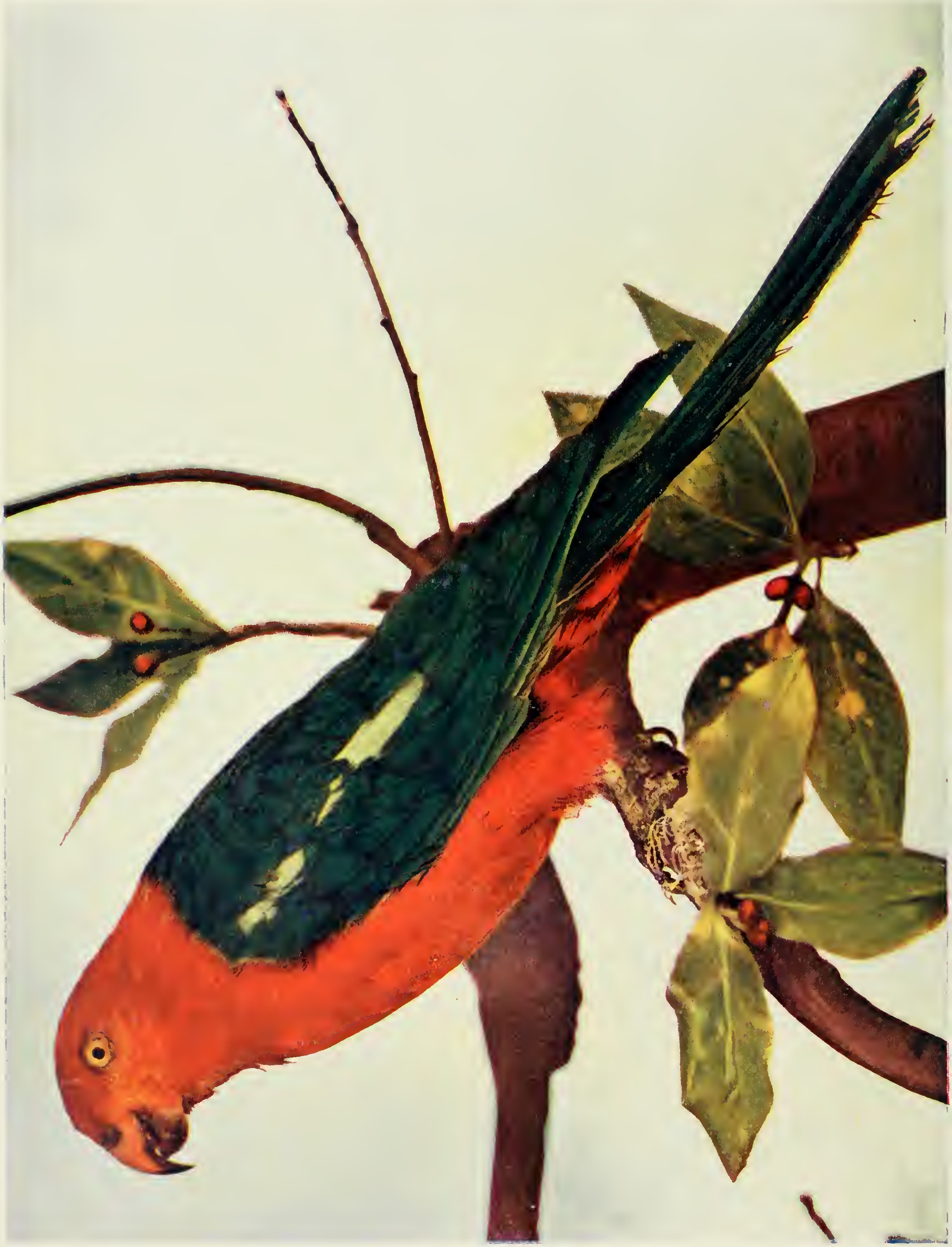
The Robin is not one of our most charming songsters, yet its carol is sweet, hearty and melodious. Its principal song is in the morning before sunrise, when it mounts the top of some tall tree, and with its wonderful power of song, announces the coming of day. When educated, it imitates the sounds of various birds, and even sings tunes. It must be amusing to hear it pipe out so solemn a strain as Old Hundred.

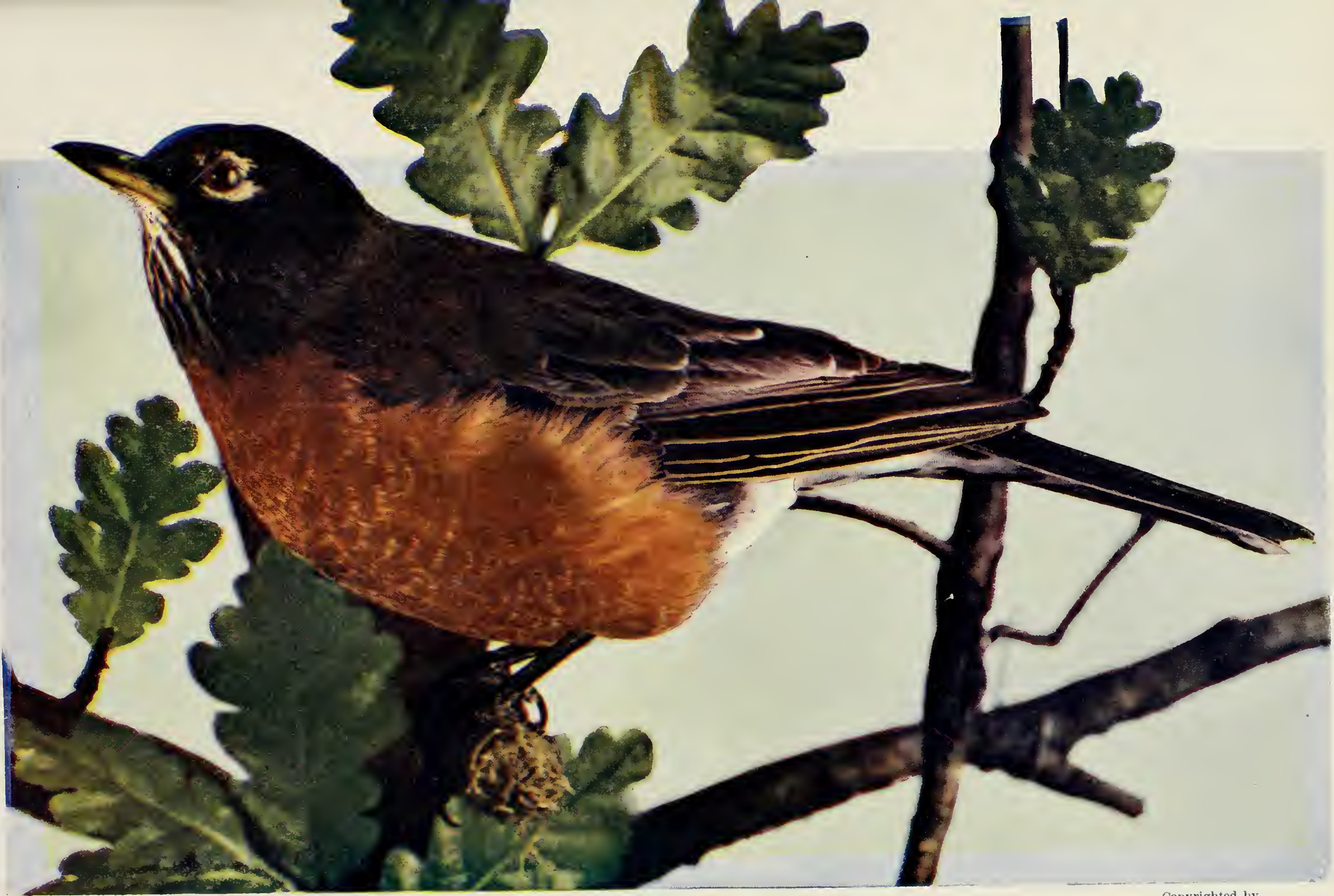
It has no remarkable habits. It shows considerable courage and anxiety for its young, and is a pattern of propriety when keeping house and concerned with the care of its offspring. Two broods are often reared out of the same nest. In the Fall these birds become restless and wandering, often congregating in large flocks, when, being quite fat, they are much esteemed as food.

The Robin's nest is sometimes built in a corner of the porch, but oftener it is saddled on the horizontal limb of an orchard tree. It is so large and poorly concealed that any boy can find it, yet it is seldom molested. The Robin is not a skillful architect. The masonry of its nest is rough and the material course, being composed largely of leaves or old grass, cemented with mud. The eggs number four to six and are greenish blue in color.

An observer tells the following story of this domestic favorite:

"For the last three years a Robin has nested on a projecting pillar that supports the front piazza. In the Spring of the first year she built her nest on the top of the pillar—a rude affair—it was probably her first effort. The same season she made her second nest in the forks of an Oak, which took her only a few hours to complete.





ROBIN.
Life-size.

Copyrighted by
Nature Study Pub. Co., 1897, Chicago.

She reared three broods that season; for the third family she returned to the piazza, and repaired the first nest. The following Spring she came again to the piazza, but selected another pillar for the site of her domicile, the construction of which was a decided improvement upon the first. For the next nest she returned to the Oak and raised a second story on the old one of the previous year, but making it much more symetrical than the one beneath. The present season her first dwelling was as before, erected on a pillar of the piazza—as fine a structure as I ever saw this species build. When this brood was fledged she again repaired to the Oak, and reared a third story on the old domicile, using the moss before mentioned, making a very elaborate affair, and finally finishing up by festooning it with long sprays of moss. This bird and her mate were quite tame. I fed them with whortleberries, which they seemed to relish, and they would come almost to my feet to get them."

The amount of food which the young robin is capable of absorbing is enormous. A couple of vigorous, half-grown birds have been fed, and in twelve hours devoured ravenously, sixty-eight earth worms, weighing thirty-four pennyweight, or forty-one per cent more than their own weight. A man at this rate should eat about seventy pounds of flesh per day, and drink five or six gallons of water.

The following poem by the good Quaker poet Whittier is sweet because *he* wrote it, interesting because it recites an old legend which incidentally explains the color of the robin's breast, and unique because it is one of the few poems about our American bird.

THE ROBIN.

My old Welsh neighbor over the way
Crept slowly out in the sun of spring,
Pushed from her ears the locks of gray,
And listened to hear the robin sing.

Her grandson, playing at marbles, stopped,
And—cruel in sport, as boys will be—
Tossed a stone at the bird, who hopped
From bough to bough in the apple tree.

"Nay!" said the grandmother; "have you not heard,
My poor, bad boy! of the fiery pit,
And how, drop by drop, this merciful bird
Carries the water that quenches it?

"He brings cool dew in his little bill,
And lets it fall on the souls of sin:
You can see the mark on his red breast still
Of fires that scorch as he drops it in.

"My poor Bron rhuddyn! my breast-burned bird,
Singing so sweetly from limb to limb,
Very dear to the heart of Our Lord
Is he who pities the lost like Him."

"Amen!" I said to the beautiful myth;
"Sing, bird of God, in my heart as well:
Each good thought is a drop wherewith
To cool and lessen the fires of hell.

"Prayers of love like rain-drops fall,
Tears of pity are cooling dew,
And dear to the heart of Our Lord are all
Who suffer like Him in the good they do."

THE KINGFISHER.

Dear Children:

I shall soon arrive from the south. I hear that all the birds are going to tell stories to the boys and girls.

I have never talked much with children myself for I never really cared for people. They used to say that the dead body of a Kingfisher kept them safe in war and they said also that it protected them in lightning.

Even now in some places in France they call us the moth birds, for they believe that our bodies will keep away moths from woolen cloth.

I wish that people would not believe such things about us. Perhaps you cannot understand me when I talk. You may think that you hear only a child's rattle.

Listen again! It is I, the Kingfisher. That sound is my way of talking. I live in the deep woods. I own a beautiful stream and a clear, cool lake. Oh, the little fish in that lake are good enough for a king to eat! I know, for I am a king.

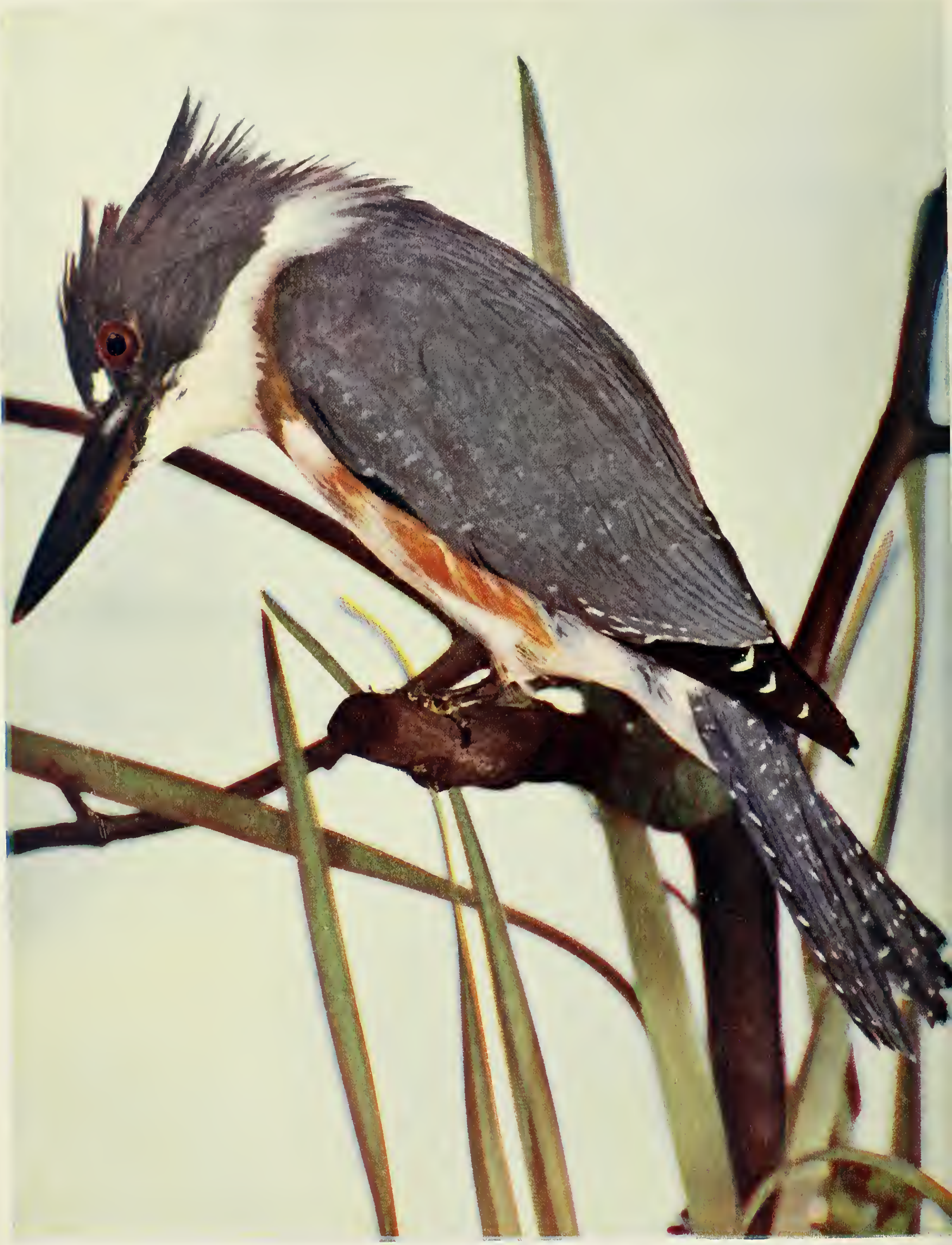
You may see me or some of my mates near the lake any pleasant day. People used to say that we always brought pleasant weather. That is a joke. It is the pleasant weather that always brings us from our homes. When it storms or rains we cannot see the fish in the lake. Then we may as well stay in our nests.

My home once belonged to a water rat. He dug the fine hall in the gravel bank in my stream. It is nearly six feet long. The end of it is just the kind of a place for a nest. It is warm, dry and dark. In June my wife and I will settle down in it. By that time we shall have the nest well lined with fish bones. We shall put in some dried grass too. The fish bones make a fine lining for a nest. You know we swallow the fish whole, but we save all the bones for our nest.

I shall help my wife hatch her five white eggs and shall try in every way to make my family safe.

Please tell the people not to believe those strange things about me and you will greatly oblige,

A neighbor,
The Kingfisher.



KINGFISHER.
5/6 Life-size.

Copyrighted by
Nature Study Pub. Co., 1897, Chicago.

THE KINGFISHER.

The Lone Fisherman.

THE American species belongs to the true group of Kingfishers. It occupies the whole continent of North America and although migrating in the north, he is a constant resident of our southern states. The belted Kingfisher is the only variety found along the inland streams of the United States. Audubon declares that "belted" should apply only to the female, however.

Like most birds of brilliant plumage, the Kingfisher prefers a quiet and secluded haunt. It loves the little trout streams, with wooded and precipitous banks, the still ponds and small lakes, ornamental waters in parks, where it is not molested, and the sides of sluggish rivers, drains and mill-ponds.

Here in such a haunt the bird often flits past like an indistinct gleam of bluish light. Fortune may sometimes favor the observer and the bird may alight on some twig over the stream, its weight causing it to sway gently to and fro. It eagerly scans the shoal of young trout sporting in the pool below, when suddenly it drops down into the water, and, almost before the observer is aware of the fact, is back again to its perch with a struggling fish in its beak. A few blows on the branch and its prey is ready for the dexterous movement of the bill, which places it in a position for swallowing. Sometimes the captured fish is adroitly jerked into the air and caught as it falls.

Fish is the principal food of the Kingfisher; but it also eats various kinds of insects, shrimps, and even small crabs. It rears its young in a hole, which is made in the banks of the stream it frequents. It is a slatternly bird, fouls its own nest and its peerless eggs. The nesting hole is bored rather slowly, and takes from one to two weeks to complete. Six or eight white glossy eggs are laid, sometimes on the bare soil, but often on the fish bones which, being indigestible, are thrown up by the bird in pellets.

The Kingfisher has a crest of feathers on the top of his head, which he raises and lowers, especially when trying to drive intruders away from his nest.

The plumage is compact and oily, making it almost impervious to water. The flesh is fishy and disagreeable to the taste, but the eggs are said to be good eating. The wings are long and pointed and the bill longer than the head. The voice is harsh and monotonous.

It is said that few birds are connected with more fables than the Kingfisher. The superstition that a dead Kingfisher when suspended by the throat, would turn its beak to that particular point of the compass from which the wind blew, is now dead. It was also supposed to possess many astonishing virtues, as that its dried body would avert thunderbolts, and if kept in a wardrobe would preserve from moths the woolen stuffs and the like contained in it.

" Under the name of " halcyon," it was fabled by the ancients to build its nest on the surface of the sea, and to have the power of calming the troubled waves during its period of incubation; hence the phrase " halcyon days."

A pair of Kingfishers have had their residence in a bank at the south end of Washington Park, Chicago, for at least three seasons past. We have watched the Kingfisher from secluded spots on Long Island ponds and tidal streams, where his peculiar laughing note is the same as that which greets the ear of the fisherman on far inland streams on still summer days.

THE BLACKBIRD.

"I could not think so plain a bird
Could sing so fine a song."

One on another against the wall
Pile up the books—I am done with them all:
I shall be wise, if I ever am wise,
Out of my own ears, and of my own eyes.

One day of the woods and their balmy light—
One hour on the top of a breezy hill,
There in the sassafras all out of sight
The Blackbird is splitting his slender bill
For the ease of his heart:
Do you think if he said
"I will sing like this bird with the mud colored back
And the two little spots of gold over his eyes,
Or like to this shy little creature that flies
So low to the ground, with the amethyst rings
About her small throat—all alive when she sings
With a glitter of shivering green—for the rest,
Gray shading to gray, with the sheen of her breast
Half rose and half fawn—
Or like this one so proud,
That flutters so restless, and cries out so loud,
With stiff horny beak and a top-knotted head,
And a lining of scarlet laid under his wings—"
Do you think, if he said, "I'm ashamed to be black!"
That he could have shaken the sassafras-tree
As he does with the song he was born to? not he!

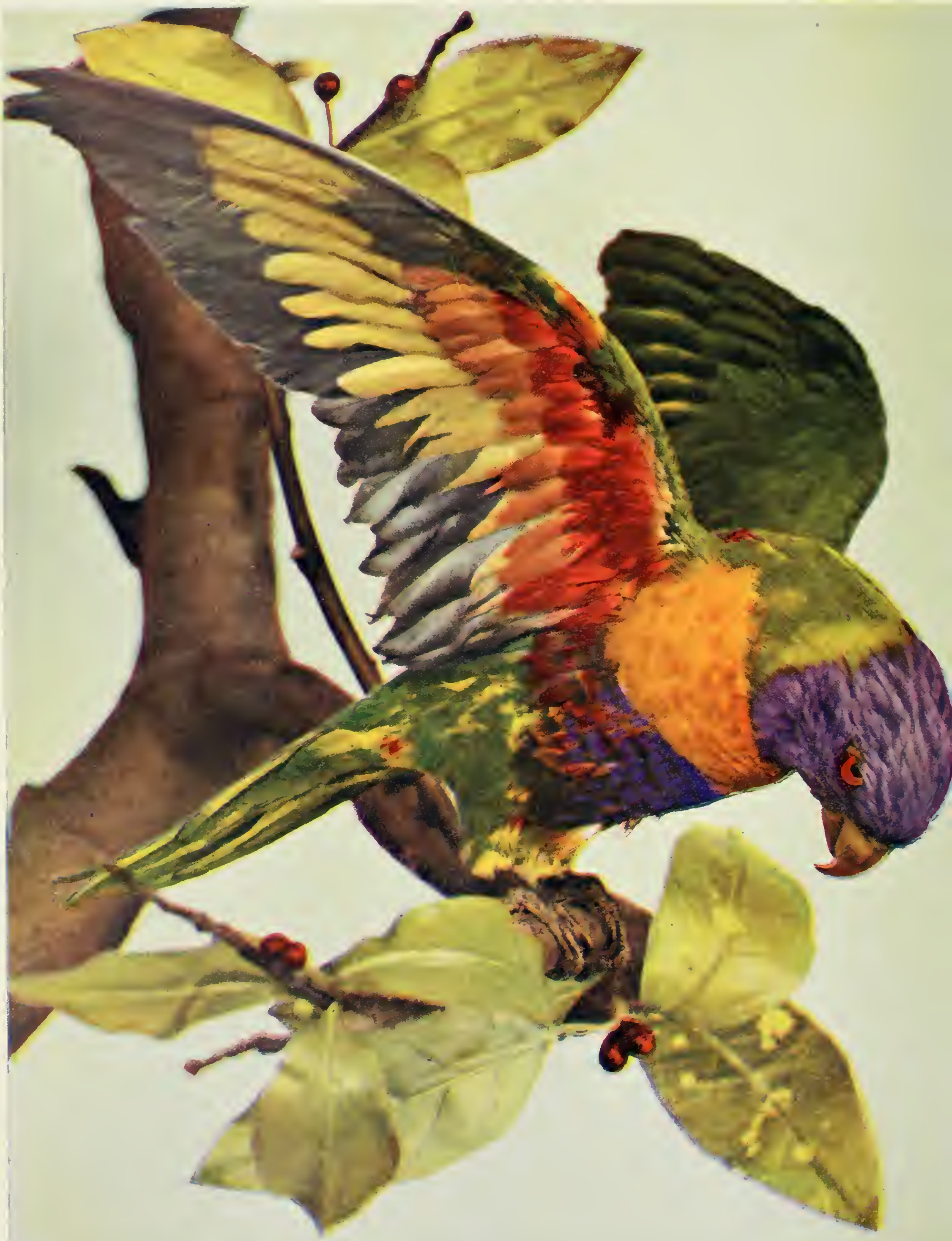
—ALICE CARY.

"Do you ne'er think what wondrous beings these?
Do you ne'er think who made them—who taught
The dialect they speak, where melodies
Alone are the interpreters of thought?
Whose household words are songs in many keys,
Sweeter than instrument of man ere caught!
Whose habitation in the tree-tops even
Are half-way houses on the road to heaven!

* * * * * * *

"You call them thieves or pillagers; but know,
They are the winged wardens of your farms,
Who from the cornfields drive the insidious foe,
And from your harvest keep a hundred harms;
Even the blackest of them all, the crow,
Renders good service as your man-at-arms,
Crushing the beetle in his coat of mail,
And crying havoc on the slug and snail."

—FROM "THE BIRDS OF KILLINGWORTH."



BLUE MOUNTAIN LORY.
¾ Life-size.

BLUE MOUNTAIN LORY.

THIS bird inhabits the vast plains of the interior of New South Wales. It is one of the handsomest, not only of the Australian Parrots, but takes foremost place among the most gorgeously dressed members of the Parrot family that are to be met with in any part of the world. It is about eleven or twelve inches in length. The female cannot with certainty be distinguished from her mate, but is usually a very little smaller. The Lory seldom decends to the ground, but passes the greater part of its life among the gum trees upon the pollen and nectar on which it mainly subsists. In times of scarcity, however, it will also eat grass seeds, as well as insects, for want of which it is said, it often dies prematurely when in captivity.

Dr. Russ mentions that a pair obtained from a London dealer in 1870 for fifty dollars were the first of these birds imported, but the London Zoological Society had secured some of them two years before.

Despite his beauty, the Blue Mountain Lory is not a desirable bird to keep, as he requires great care. A female which survived six years in an aviary, laying several eggs, though kept singly, was fed on canary seed, maize, a little sugar, raw beef and carrots. W. Gedney seems to have been peculiarly happy in his specimens, remarking, "But for the terribly sudden death which so often overtakes these birds, they would be the most charming feathered pets that a lady could possess, having neither the power nor inclination to bite savagely." The same writer's recommendation to feed this Lory exclusively upon soft food, in which honey forms a great part, probably accounts for his advice to those "whose susceptible natures would be shocked" by the sudden death of their favorite, not to become the owner of a Blue Mountain Lory.

Like all the parrot family these Lories breed in hollow boughs, where the female deposits from three to four white eggs, upon which she sits for twenty-one days. The young from the first resemble their parents closely, but are a trifle less brilliantly colored.

They are very active and graceful, but have an abominable shriek. The noise is said to be nearly as disagreeable as the plumage is beautiful. They are very quarrelsome and have to be kept apart from the other parrots, which they will kill. Other species of birds however, are not disturbed by them. It is a sort of family animosity. They have been bred in captivity.

The feathers of the head and neck are long and very narrow and lie closely together; the claws are strong and hooked, indicating their tree climbing habits. Their incessant activity and amusing ways make these birds always interesting to watch.

THE RED WING BLACK BIRD.

The Bird of Society.

The blackbirds make the maples ring
With social cheer and jubilee ;
The redwing flutes his o ka-lee.—EMERSON.

THE much abused and persecuted Red Wing Black Bird is found throughout North America, from the Atlantic to the Pacific; and it breeds more or less abundantly wherever found. In New England it is generally migratory, though instances are on record where a few have been known to remain throughout the winter in Massachusetts. Passing, in January, through the lower counties of Virginia, one frequently witnesses the aerial evolutions of great numbers of these birds. Sometimes they appear as if driven about like an enormous black cloud carried before the wind, varying every moment in shape. Sometimes they rise suddenly from the fields with a noise like thunder, while the glittering of innumerable wings of the brightest vermillion, amid the black cloud, occasion a very striking effect. At times the whole congregated multitude will suddenly alight in some detached grove and commence one general concert, that can plainly be distinguished at the distance of more than two miles. With the Redwings the whole winter season seems one continued carnival. They find abundant food in the old fields of rice, buckwheat and grain, and much of their time is spent in aerial movements, or in grand vocal performances.

The Redwings, for their nest, always select either the borders of streams or low marshy situations, amongst thick bunches of reeds. One nest was found built on a slender sapling at the distance of fourteen feet from the ground. The nest was pensile, like that of the Baltimore Oriole.

They have from one to three or more broods in a season, according to locality.

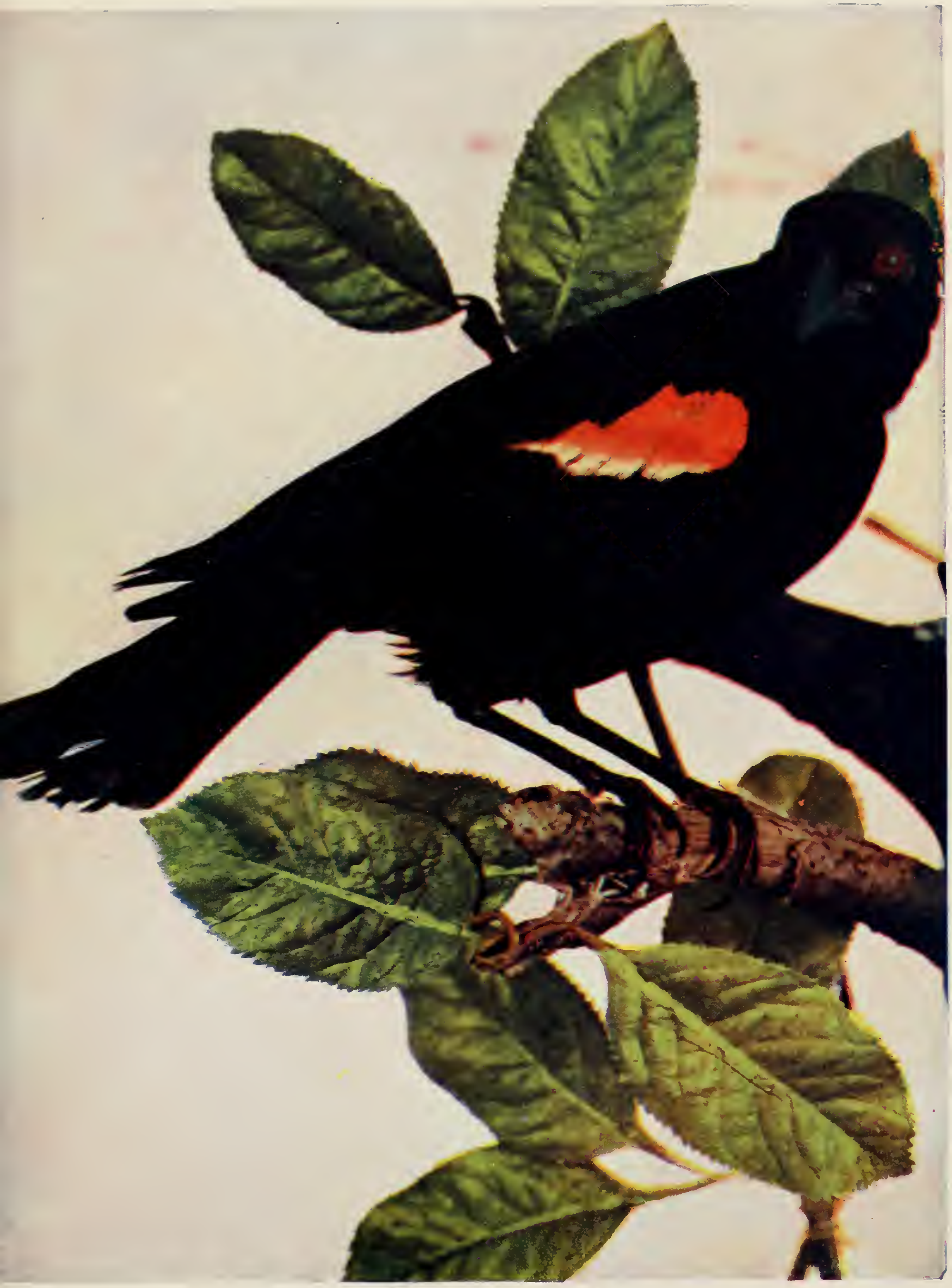
In the grain growing states they gather in immense swarms and commit havoc, and although they are shot in great numbers, and though their ranks are thinned by the attacks of hawks, it seems to have but little effect upon the survivors.

On the other hand, these Black Birds more than compensate the farmer for their mischief by the benefit they confer in the destruction of grub worms, catterpillars, and various kinds of larvæ, the secret and deadly enemies of vegetation. It has been estimated the number of insects destroyed by these birds in a single season, in the United States, to be twelve thousand millions.

The eggs average about an inch in length. They are oval in shape, have a light bluish ground, and are marbled, lined and blotched with markings of light and dark purple and black.

BLACKBIRD.

'Tis a woodland enchanted!
By no sadder spirit
Than blackbirds and thrushes,
That whistle to cheer it
All day in the bushes,
This woodland is haunted ;
And in a small clearing,
Beyond sight or hearing
Of human annoyance,
The little fount gushes.—LOWELL.



RED-WINGED BLACK BIRD.
Life-size.

THE BIRD OF SOCIETY.

The blackbird loves to be one of a great flock. He talks, sings or scolds from morning until night. He cannot keep still. He will only stay alone with his family a few months in the summer. That is the reason he is called the "Bird of Society." When he is merry, he gaily sings, "Conk-quer-ree." When he is angry or frightened he screams, "Chock! Chock!" When he is flying or bathing he gives a sweet note which sounds like ee-u-u. He can chirp—chick, check, chuck, to his little ones as softly as any other bird. But only his best friends ever hear his sweetest tones, for the Blackbirds do not know how to be polite. They all talk at once. That is why most people think they only scream and chatter. Did you ever hear the blackbirds in the cornfields? If the farmers thought about it perhaps they would feel that part of every corn crop belongs to the Blackbirds. When the corn is young, the farmer cannot see the grubs which are eating the young plants. The Blackbirds can. They feed them to their babies—many thousands in a day. That is the way the crops are saved for the farmer. But he never thinks of that. Later when the Blackbirds come for their share of the corn the farmer says, "No, they shall not have my corn. I must stop that quickly." Perhaps the Blackbirds said the same thing to the grubs in the spring. It is hard to have justice for everyone.

In April the Blackbird and his mate leave the noisy company. They seek a cosy home near the water where they can be quiet until August. They usually choose a swampy place among low shrubs and rushes. Here in the deep nest of coarse grass, moss and mud the mother bird lays her five eggs. They are very pretty—light blue with purple and black markings. Their friends say this is the best time to watch the blackbirds. In the flock they are all so much alike we cannot tell one from another. You would like to hear of some of the wise things Blackbirds do when they are tame.

One friend of the birds turned her home into a great open bird cage. Her chair was the favorite perch of her birds. She never kept them one minute longer than they wanted to stay. Yet her home was always full. This was Olive Thorne Miller. If you care to, you might ask mother to get "Bird Ways" and read you what she says about this "bird of society" and the other birds of this book.

THE AMERICAN RED BIRD.

AMERICAN RED BIRDS are among our most common cage birds, and are very generally known in Europe, numbers of them having been carried over both to France and England. Their notes are varied and musical; many of them resembling the high notes of a fife, and are nearly as loud. They are in song from March to September, beginning at the first appearance of dawn and repeating successively twenty or thirty times, and with little intermission, a favorite strain.

The sprightly figure and gaudy plumage of the Red Bird, his vivacity, strength of voice, and actual variety of note, and the little expense with which he is kept, will always make him a favorite.

This species is more numerous to the east of the great range of the Alleghanies, but is found in Pennsylvania and Ohio, and is numerous in the lower parts of the Southern States. In January and February they have been found along the roadsides and fences, hovering together in half dozens, associating with snow birds, and various kinds of sparrows. In the northern states they are migratory, and in the southern part of Pennsylvania they reside during the whole year, frequenting the borders of rivulets, in sheltered hollows, covered with holly, laurel, and other evergreens. They love also to reside in the vicinity of fields of Indian corn, a grain that constitutes their chief and favorite food. The seeds of apples, cherries, and other fruit are also eaten by them, and they are accused of destroying bees.

Early in May the Red Bird begins to prepare his nest, which is very often fixed in a holly,cedar or laurel bush. A pair of Red Birds in Ohio returned for a number of years to build their nest in a honeysuckle vine under a portico. They were never disturbed and never failed to rear a brood of young. The nest was constructed of small twigs, dry weeds, slips of vine bark, and lined with stalks of fine grass. Four eggs of brownish olive were laid, and they usually raised two broods in a season.

In confinement they fade in color, but if well cared for, will live to a considerable age. They are generally known by the names: Red Bird, Virginia Red Bird, Virginia Nightingale, and Crested Red Bird. It is said that the female often sings nearly as well as the male.

THE REDBIRDS.

Two Redbirds came in early May,
Flashing like rubies on the way;
Their joyous notes awoke the day,
And made all nature glad and gay.

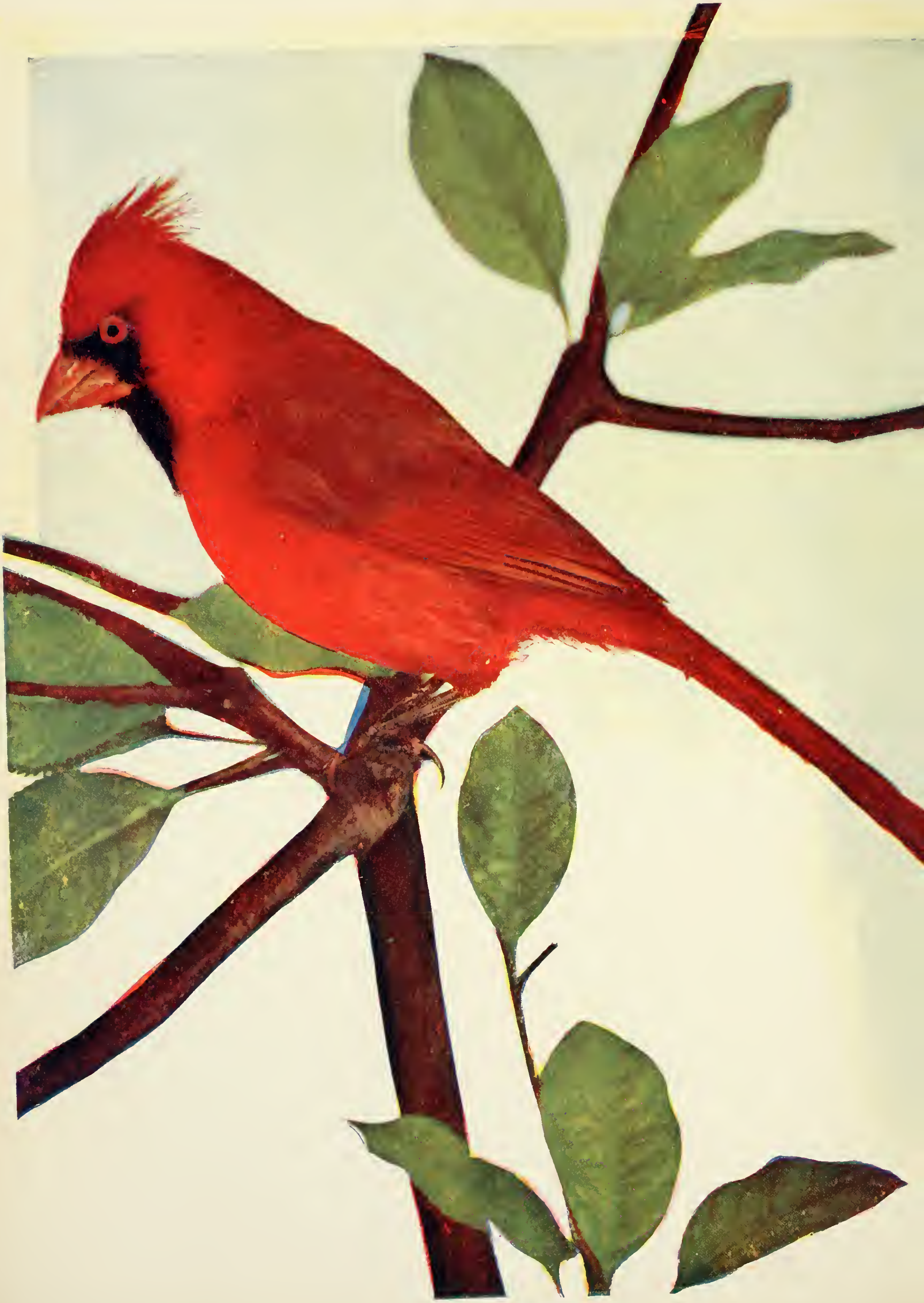
Thrice welcome! crested visitants;
Thou doest well to seek our haunts;
The bounteous vine, by thee possessed,
From prying eyes shall keep thy nest.

Sing to us in the early dawn;
'Tis then thy scarlet throats have drawn
Refreshing draughts from drops of dew,
The enchanting concert to renew.

No plaintive notes, we ween, are thine;
They gurgle like a royal wine;
They cheer, rejoice, they quite outshine
Thy neighbor's voice, tho' it's divine.

Free as the circumambient air
Do thou remain, a perfect pair,
To come once more when Proserpine
Shall swell the buds of tree and vine.

--C. C. M.



CHICAGO COLORTYPE CO.

CARDINAL.

THE RED BIRD.

Is it because he wears a red hat,
  That we call him the Cardinal Bird?
Or is it because his voice is so rich
  That scarcely a finer is heard?

'Tis neither, but this—I've guessed it, I'm sure—
His dress is a primary color of Nature.
It blends with the Oriole's golden display,
And the garment of Blue Bird completes the array.

C. C M

LITTLE BOY BLUE.

Boys and girls, don't you think that is a pretty name? I came from the warm south, where I went last winter, to tell you that Springtime is nearly here.

When I sing, the buds and flowers and grass all begin to whisper to one another, "Springtime is coming for we heard the Bluebird say so," and then they peep out to see the warm sunshine. I perch beside them and tell them of my long journey from the south and how I knew just when to tell them to come out of their warm winter cradles. I am of the same blue color as the violet that shows her pretty face when I sing, "Summer is coming, and Springtime is here."

I do not like the cities for they are black and noisy and full of those troublesome birds called English Sparrows. I take my pretty mate and out in the beautiful country we find a home. We build a nest of twigs, grass and hair, in a box that the farmer puts up for us near his barn.

Sometimes we build in a hole in some old tree and soon there are tiny eggs in the nest. I sing to my mate and to the good people who own the barn. I heard the farmer say one day, "Isn't it nice to hear the Bluebird sing? He must be very happy." And I am, too, for by this time there are four or five little ones in the nest.

Little Bluebirds are like little boys—they are always hungry. We work hard to find enough for them to eat. We feed them nice fat worms and bugs, and when their little wings are strong enough, we teach them how to fly. Soon they are large enough to hunt their own food, and can take care of themselves.

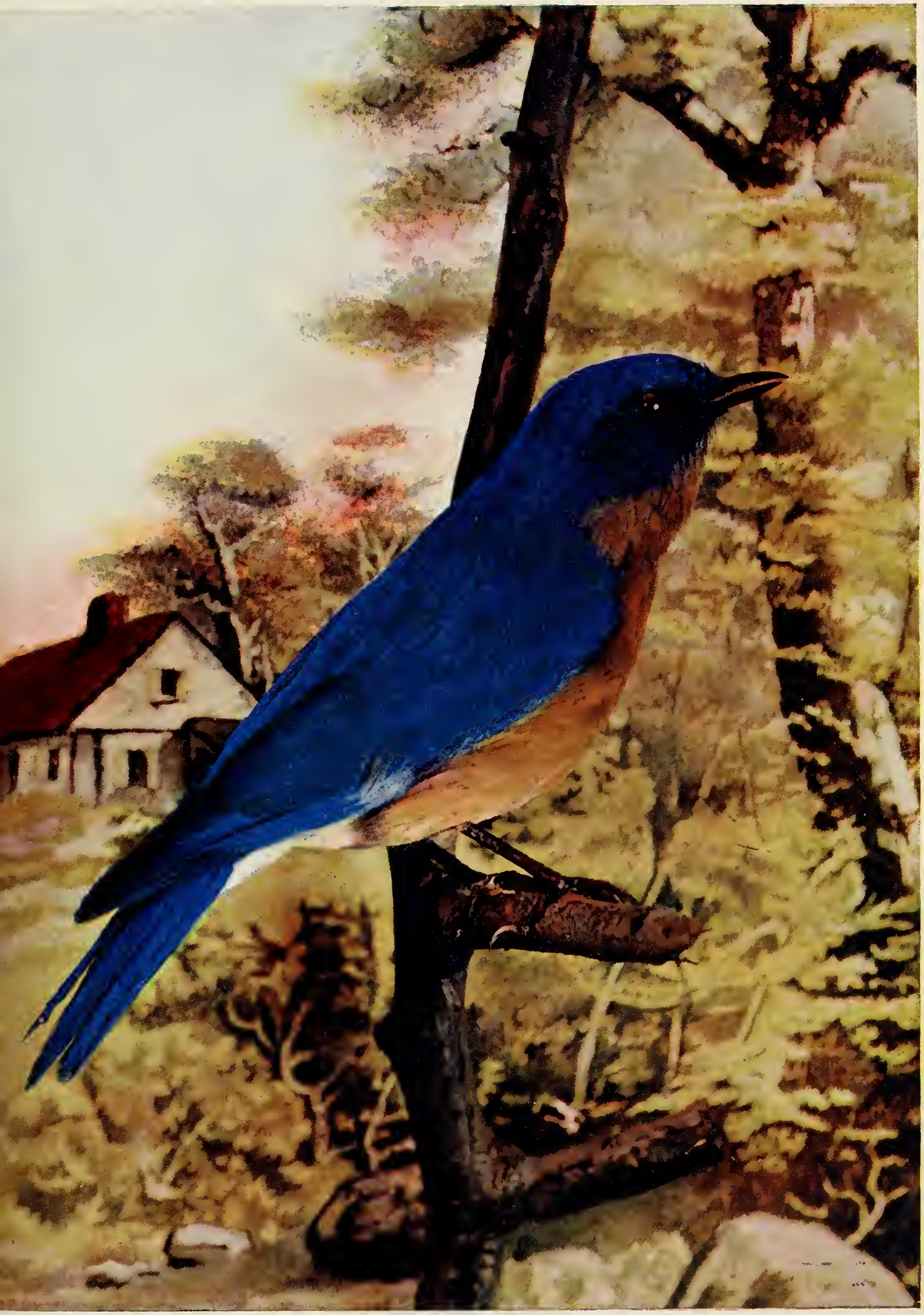
The summer passes, and when we feel the breath of winter we go south again, for we do not like the cold.

THE BLUE BIRD.

I know the song that the Bluebird is singing
Out in the apple tree, where he is swinging.
Brave little fellow! the skies may be dreary,
Nothing cares he while his heart is so cheery.
Hark! how the music leaps out from his throat,
Hark! was there ever so merry a note?

Listen a while, and you'll hear what he's saying,
Up in the apple tree swinging and swaying.
"Dear little blossoms down under the snow,
You must be weary of winter, I know;
Hark! while I sing you a message of cheer,
Summer is coming, and springtime is here!"

"Dear little snow-drop! I pray you arise;
Bright yellow crocus! come open your eyes;
Sweet little violets, hid from the cold,
Put on our mantles of purple and gold;
Daffodils! daffodils! say, do you hear,
Summer is coming! and springtime is here!"



BLUE BIRD.
Life-size.

THE BLUE BIRD.

Winged lute that we call a blue bird,
You blend in a silver strain
The sound of the laughing waters,
The patter of spring's sweet rain,
The voice of the wind, the sunshine,
And fragrance of blossoming things,
Ah! you are a poem of April
That God endowed with wings. E. E. R.

LIKE a bit of sky this little harbinger of spring appears, as we see him and his mate househunting in early March. Oftentimes he makes his appearance as early as the middle of February, when his attractive note is heard long before he himself is seen. He is one of the last to leave us, and although the month of November is usually chosen by him as the fitting time for departure to a milder clime, his plaintive note is quite commonly heard on pleasant days throughout the winter season, and a few of the braver and hardier ones never entirely desert us. The Robin and the Blue Bird are tenderly associated in the memories of most persons whose childhood was passed on a farm or in the country village. Before the advent of the English Sparrow, the Blue Bird was sure to be the first to occupy and the last to defend the little box prepared for his return, appearing in his blue jacket somewhat in advance of the plainly habited female, who on her arrival quite often found a habitation selected and ready for her acceptance, should he find favor in her sight. And then he becomes a most devoted husband and father, sitting by the nest and warbling with earnest affection his exquisite tune, and occasionally flying away in search of food for his mate and nestlings.

The Blue Bird rears two broods in the season, and, should the weather be mild, even three. His nest contains three eggs.

In the spring and summer when he is happy and gay, his song is extremely soft and agreeable, while it grows very mournful and plaintive as cold weather approaches. He is mild of temper, and a peaceable and harmless neighbor, setting a fine example of amiability to his feathered friends. In the early spring, however, he wages war against robins, wrens, swallows, and other birds whose habitations are of a kind to take his fancy. A celebrated naturalist says: "This bird seems incapable of uttering a harsh note, or of doing a spiteful, ill-tempered thing."

Nearly everybody has his anecdote to tell of the Blue Bird's courage, but the author of "Wake Robin" tells his exquisitely thus: "A few years ago I put up a little bird house in the back end of my garden for the accommodation of the wrens, and every season a pair have taken up their abode there. One spring a pair of Blue Birds looked into the tenement, and lingered about several days, leading me to hope that they would conclude to occupy it. But they finally went away. Late in the season the wrens appeared, and after a little coquetting, were regularly installed in their old quarters, and were as happy as only wrens can be. But before their honeymoon was over, the Blue Birds returned. I knew something was wrong before I was up in the morning. Instead of that voluble and gushing song outside the window, I heard the wrens scolding and crying out at a fearful rate, and on going out saw the Blue Birds in possession of the box. The poor wrens were in despair and were forced to look for other quarters."

THE SWALLOW.

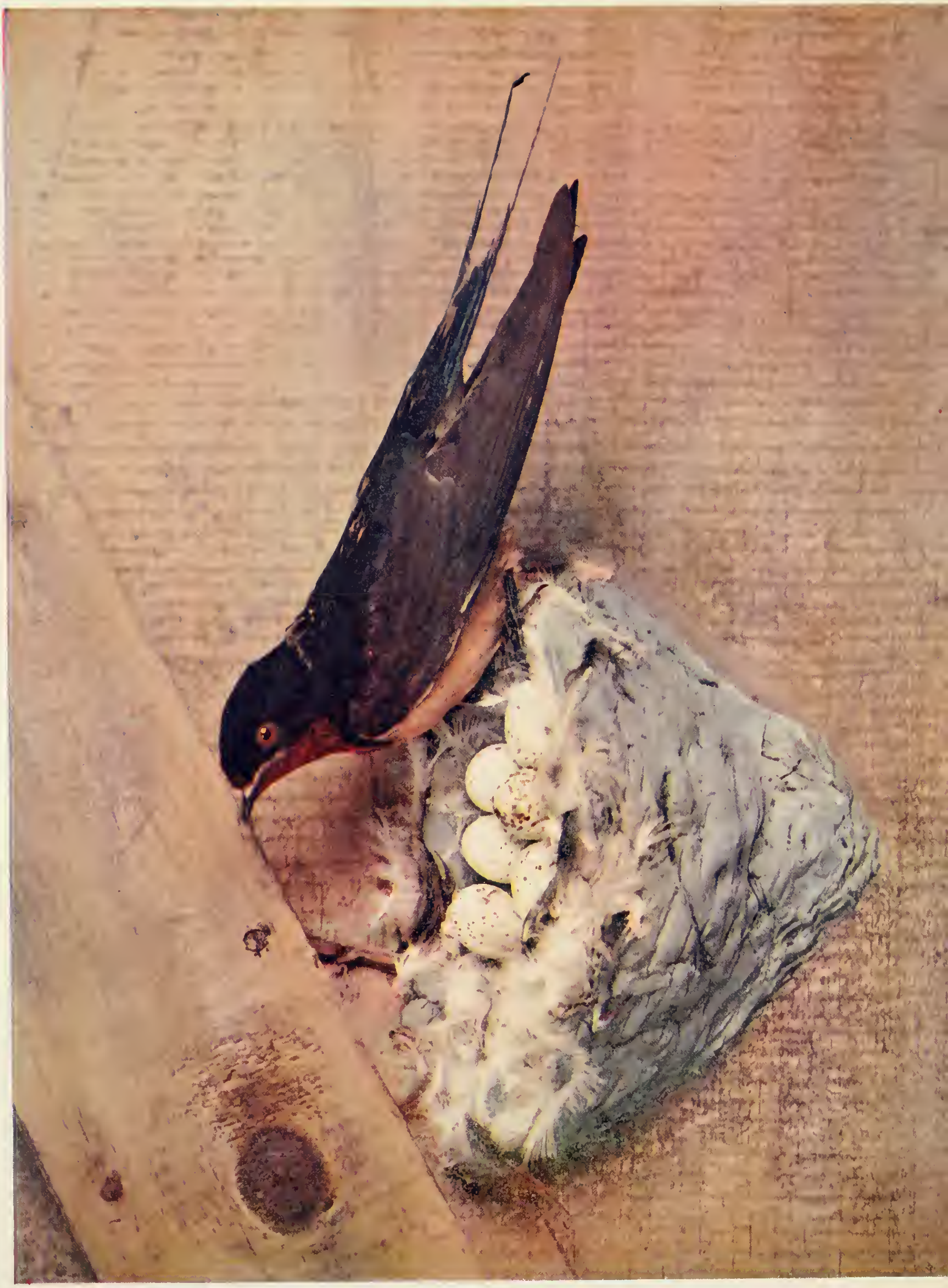
> "Come, summer visitant, attach
> To my reedroof thy nest of clay,
> And let my ear thy music catch,
> Low twitting underneath the thatch,
> At the gray dawn of day."

SURE harbingers of spring are the Swallows. They are very common birds, and frequent, as a rule, the cultivated lands in the neighborhood of water, showing a decided preference for the habitations of man. "How gracefully the swallows fly! See them coursing over the daisy-bespangled grass fields; now they skim just over the blades of grass, and then with a rapid stroke of their long wings mount into the air and come hovering above your head, displaying their rich white and chestnut plumage to perfection. Now they chase each other for very joyfulness, uttering their sharp twittering notes; then they hover with expanded wings like miniature Kestrels, or dart downwards with the velocity of the sparrowhawk; anon they flit rapidly over the neighboring pool, occasionally dipping themselves in its calm and placid waters, and leaving a long train of rings marking their varied course. How easily they turn, or glide over the surrounding hedges, never resting, never weary, and defying the eye to trace them in the infinite turnings and twistings of their rapid shooting flight. You frequently see them glide rapidly near the ground, and then with a sidelong motion mount aloft, to dart downwards like an animated meteor, their plumage glowing in the light with metallic splendor, and the row of white spots on the tail contrasting beautifully with the darker plumage."

The Swallow is considered a life-paired species, and returns to its nesting site of the previous season, building a new nest close to the old one. His nest is found in barns and outhouses, upon the beams of wood which support the roof, or in any place which assures protection to the young birds. It is cup-shaped and artfully moulded of bits of mud. Grass and feathers are used for the lining. "The nest completed, five or six eggs are deposited. They are of a pure white color, with deep rich brown blotches and spots, notably at the larger end, round which they often form a zone or belt." The sitting bird is fed by her mate.

The young Swallow is distinguished from the mature birds by the absence of the elongated tail feathers, which are a mark of maturity alone. His food is composed entirely of insects. Swallows are on the wing fully sixteen hours, and the greater part of the time making terrible havoc amongst the millions of insects which infest the air. It is said that when the Swallow is seen flying high in the heavens, it is a never failing indication of fine weather.

A pair of Swallows on arriving at their nesting place of the preceding Summer found their nest occupied by a Sparrow, who kept the poor birds at a distance by pecking at them with his strong beak whenever they attempted to dislodge him. Wearied and hopeless of regaining possession of their property, they at last hit upon a plan which effectually punished the intruder. One morning they appeared with a few more Swallows—their mouths filled with a supply of tempered clay—and, by their joint efforts in a short time actually plastered up the entrance to the hole, thus barring the Sparrow from the home which he had stolen from the Swallows.



THE BROWN THRUSH.

"However the world goes ill,
The Thrushes still sing in it."

THE Mocking-bird of the North, as the Brown Thrush has been called, arrives in the Eastern and Middle States about the 10th of May, at which season he may be seen, perched on the highest twig of a hedge, or on the topmost branch of a tree, singing his loud and welcome song, that may be heard a distance of half a mile. The favorite haunt of the Brown Thrush, however, is amongst the bright and glossy foliage of the evergreens. "There they delight to hide, although not so shy and retiring as the Blackbird; there they build their nests in greatest numbers, amongst the perennial foliage, and there they draw at nightfall to repose in warmth and safety." The Brown Thrasher sings chiefly just after sunrise and before sunset, but may be heard singing at intervals during the day. His food consists of wild fruits, such as blackberries and raspberries, snails, worms, slugs and grubs. He also obtains much of his food amongst the withered leaves and marshy places of the woods and shrubberies which he frequents. Few birds possess a more varied melody. His notes are almost endless in variety, each note seemingly uttered at the caprice of the bird, without any perceptible approach to order.

The site of the Thrush's nest is a varied one, in the hedgerows, under a fallen tree or fence-rail; far up in the branches of stately trees, or amongst the ivy growing up their trunks. The nest is composed of the small dead twigs of trees, lined with the fine fibers of roots. From three to five eggs are deposited, and are hatched in about twelve days. They have a greenish background, thickly spotted with light brown, giving the whole egg a brownish appearance.

The Brown Thrush leaves the Eastern and Middle States, on his migration South, late in September, remaining until the following May.

THE THRUSH'S NEST.

"Within a thick and spreading hawthorn bush
That overhung a molehill, large and round,
I heard from morn to morn a merry thrush
Sing hymns of rapture while I drank the sound
With joy—and oft an unintruding guest,
I watched her secret toils from day to day;
How true she warped the moss to form her nest,
And modeled it within with wood and clay.
And by and by, with heath-bells gilt with dew,
There lay her shining eggs as bright as flowers,
Ink-spotted over, shells of green and blue:
And there I witnessed, in the summer hours,
A brood of nature's minstrels chirp and fly,
Glad as the sunshine and the laughing sky."

THE BROWN THRUSH.

Dear Readers:

My cousin Robin Redbreast told me that he wrote you a letter last month and sent it with his picture. How did you like it? He is a pretty bird—Cousin Robin—and everybody likes him. But I must tell you something of myself.

Folks call me by different names—some of them nicknames, too.

The cutest one of all is Brown Thrasher. I wonder if you know why they call me Thrasher. If you don't, ask some one. It is really funny.

Some people think Cousin Robin is the sweetest singer of our family, but a great many like my song just as well.

Early in the morning I sing among the bushes, but later in the day you will always find me in the very top of a tree and it is then I sing my best.

Do you know what I say in my song? Well, if I am near a farmer while he is planting, I say: "Drop it, drop it—cover it up, cover it up—pull it up, pull it up, pull it up."

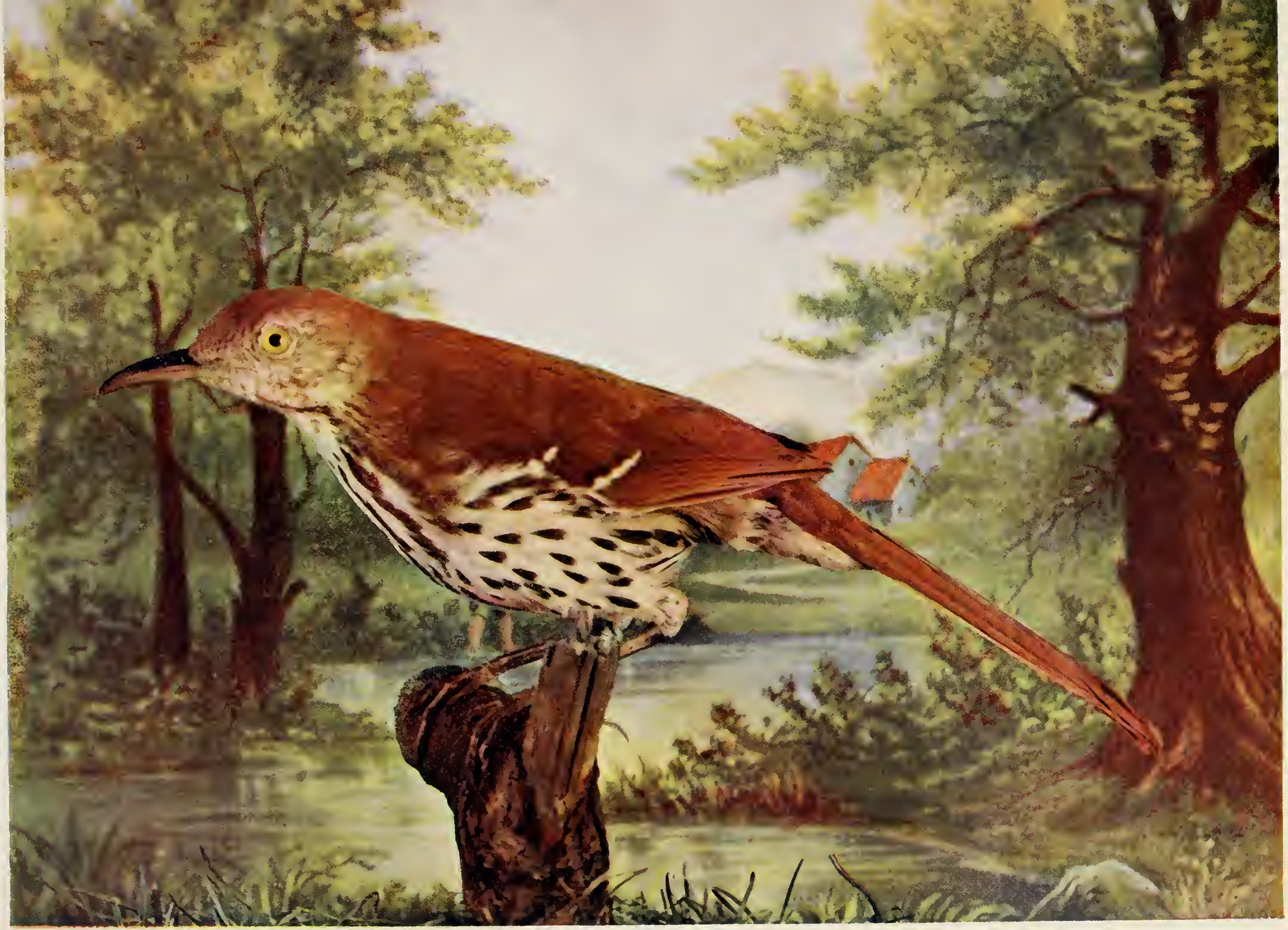
One thing I very seldom do and that is, sing when near my nest. Maybe you can tell why. I'm not very far from my nest now. I just came down to the stream to get a drink and am watching that boy on the other side of the stream. Do you see him?

One dear lady who loves birds has said some very nice things about me in a book called "Bird Ways." Another lady has written a beautiful poem about my singing. Ask your mamma or teacher the names of these ladies. Here is the poem:

THERE'S a merry brown thrush sitting up in a tree.
He is singing to me! He is singing to me!
And what does he say—little girl, little boy?
"Oh, the world's running over with joy!
        Hush! Look! In my tree,
        I am as happy as happy can be."

And the brown thrush keeps singing, "A nest, do you see,
And five eggs, hid by me in the big cherry tree?
Don't meddle, don't touch—little girl, little boy—
Or the world will lose some of its joy!
        Now I am glad! now I am free!
        And I always shall be,
        If you never bring sorrow to me."

So the merry brown thrush sings away in the tree
To you and to me—to you and to me;
And he sings all the day—little girl, little boy—
"Oh, the world's running over with joy!
        But long it won't be,
        Don't you know? don't you see?
        Unless we're good as good can be."



BROWN THRASHER.
$^7/_{10}$ Life-size.

THE BLUE BIRD.

" Drifting down the first warm wind
That thrills the earliest days of spring,
The Bluebird seeks our maple groves
And charms them into tasselling."

" He sings, and his is Nature's voice—
A gush of melody sincere
From that great fount of harmony
Which thaws and runs when Spring is here."

" Short is his song, but strangely sweet
To ears aweary of the low
Dull tramps of Winter's sullen feet,
Sandalled in ice and muffled in snow."

" Think, every morning, when the sun peeps through
The dim, leaf-latticed windows of the grove,
How jubilant the happy birds renew
Their old, melodious madrigals of love!
And when you think of this, remember, too,
'Tis always morning somewhere, and above
The awakening continents, from shore to shore,
Somewhere the birds are singing evermore.

" Think of your woods and orchards without birds!
Of empty nests that cling to boughs and beams
As in an idiot's brain remembered words
Hang empty 'mid the cobwebs of his dreams!
Will bleat of flocks or bellowing of herds
Make up for the lost music, when your teams
Drag home the stingy harvest, and no more
The feathered gleaners follow to your door?"

FROM "THE BIRDS OF KILLINGSWORTH."

THE JAPAN PHEASANT.

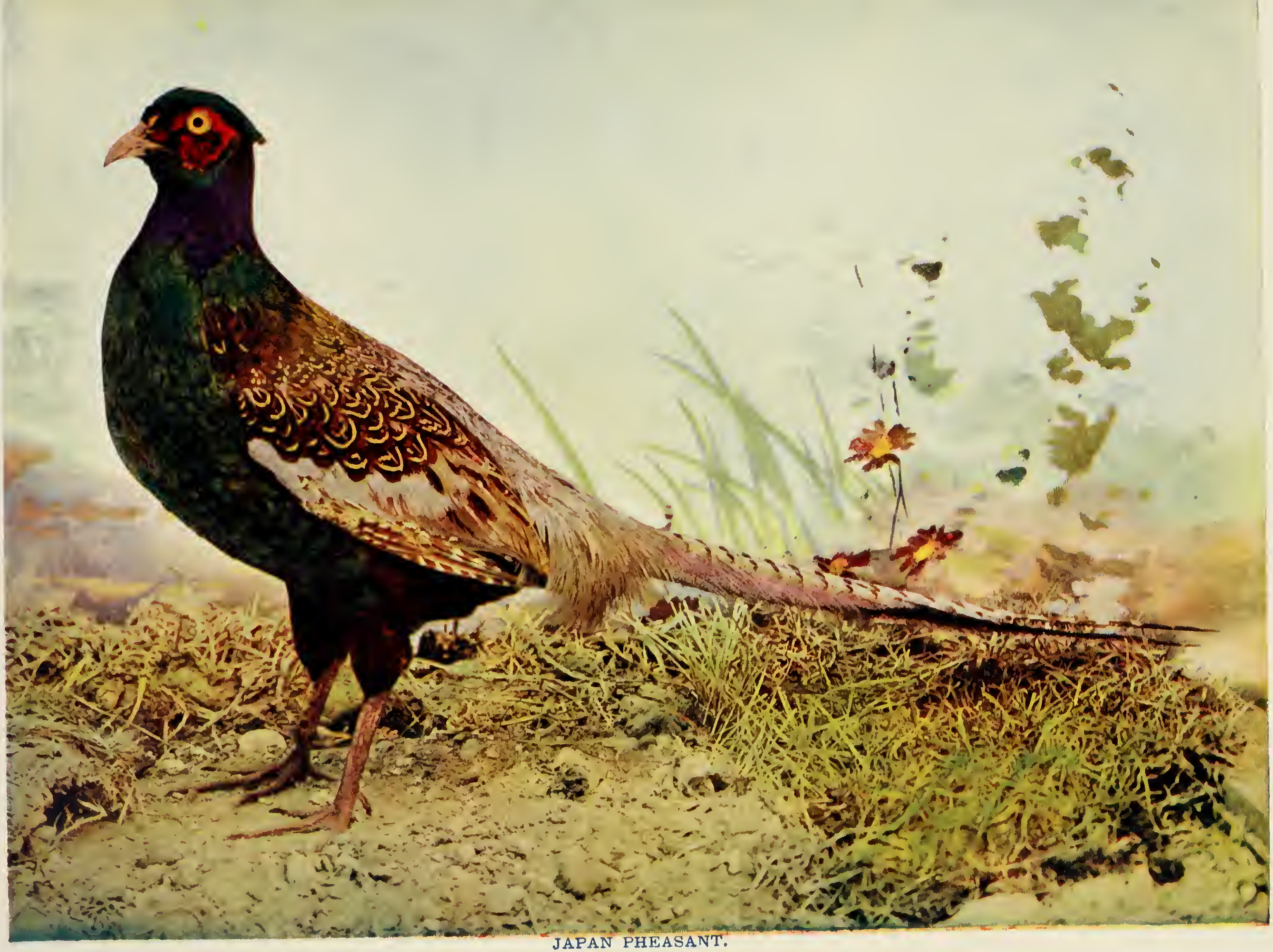
ORIGINALLY the Pheasant was an inhabitant of Asia Minor but has been by degrees introduced into many countries, where its beauty of form, plumage, and the delicacy of its flesh made it a welcome visitor. The Japan Pheasant is a very beautiful species, about which little is known in its wild state, but in captivity it is pugnacious. It requires much shelter and plenty of food, and the breed is to some degree artificially kept up by the hatching of eggs under domestic hens and feeding them in the coop like ordinary chickens, until they are old and strong enough to get their own living.

The food of this bird is extremely varied. When young it is generally fed on ants' eggs, maggots, grits, and similar food, but when it is full grown it is possessed of an accommodating appetite and will eat many kinds of seeds, roots, and leaves. It will also eat beans, peas, acorns, berries, and has even been known to eat the ivy leaf, as well as the berry.

This Pheasant loves the ground, runs with great speed, and always prefers to trust to its legs rather than to its wings. It is crafty, and when alarmed it slips quickly out of sight behind a bush or through a hedge, and then runs away with astonishing rapidity, always remaining under cover until it reaches some spot where it deems itself safe. The male is not domestic, passing an independent life during a part of the year and associating with others of its own sex during the rest of the season.

The nest is very rude, being merely a heap of leaves and grass on the ground, with a very slight depression. The eggs are numerous, about eleven or twelve, and olive brown in color. In total length, though they vary considerably, the full grown male is about three feet. The female is smaller in size than her mate, and her length a foot less.

The Japan Pheasant is not a particularly interesting bird aside from his beauty, which is indeed brilliant, there being few of the species more attractive.



JAPAN PHEASANT.
4/11 Life-size.

THE COMMON CROW.

The crow doth sing as merry as the lark,
When neither is attended.”

FEW birds have more interesting characteristics than the Common Crow, being, in many of his actions, very like the Raven, especially in his love for carrion. Like the Raven, he has been known to attack game, although his inferior size forces him to call to his assistance the aid of his fellows to cope with larger creatures. Rabbits and hares are frequently the prey of this bird which pounces on them as they steal abroad to feed. His food consists of reptiles, frogs, and lizards; he is a plunderer of other birds' nests. On the seashore he finds crabs, shrimps and inhabited shells, which he ingeniously cracks by flying with them to a great height and letting them fall upon a convenient rock.

The crow is seen in single pairs or in little bands of four or five. In the autumn evenings, however, they assemble in considerable flocks before going to roost and make a wonderful chattering, as if comparing notes of the events of the day.

The nest of the Crow is placed in some tree remote from habitations of other birds. Although large and very conspicuous at a distance, it is fixed upon one of the topmost branches quite out of reach of the hand of the adventurous urchin who longs to secure its contents. It is loosely made and saucer shaped. Sticks and softer substances are used to construct it, and it is lined with hair and fibrous roots. Very recently a thrifty and intelligent Crow built for itself a summer residence in an airy tree near Bombay, the material used being gold, silver, and steel spectacle frames, which the bird had stolen from an optician of that city. Eighty-four frames had been used for this purpose, and they were so ingeniously woven together that the nest was quite a work of art. The eggs are variable, or rather individual, in their markings, and even in their size. The Crow rarely uses the same nest twice, although he frequently repairs to the same locality from year to year. He is remarkable for his attachment to his mate and young, surpassing the Fawn and Turtle Dove in conjugal courtesy.

The Somali Arabs bear a deadly hatred toward the Crow. The origin of their detestation is the superstition that during the flight of Mohammed from his enemies, he hid himself in a cave, where he was perceived by the Crow, at that time a bird of light plumage, who, when he saw the pursuers approaching the spot, perched above Mohammed's hiding place, and screamed, “Ghar! Ghar!” (cave! cave!) so as to indicate the place of concealment. His enemies, however, did not understand the bird, and passed on, and Mohammed, when he came out of the cave, clothed the Crow in perpetual black, and commanded him to cry “Ghar” as long as Crows should live.

And he lives to a good old age. Instances are not rare where he has attained to half a century, without great loss of activity or failure of sight.

At Red Bank, a few miles northeast of Cincinnati, on the Little Miami River, in the bottoms, large flocks of Crows congregate the year around. A few miles away, high upon Walnut Hills, is a Crow roost, and in the late afternoons the Crows, singly, in pairs, and in flocks, are seen on the wing, flying heavily, with full crops, on the way to the roost, from which they descend in the early morning, crying “Caw! Caw!” to the fields of the newly planted, growing, or matured corn, or corn stacks, as the season may provide.

THE CROW.

Caw! Caw! Caw! little boys and girls. Caw! Caw! Caw. Just look at my coat of feathers. See how black and glossy it is. Do you wonder I am proud of it?

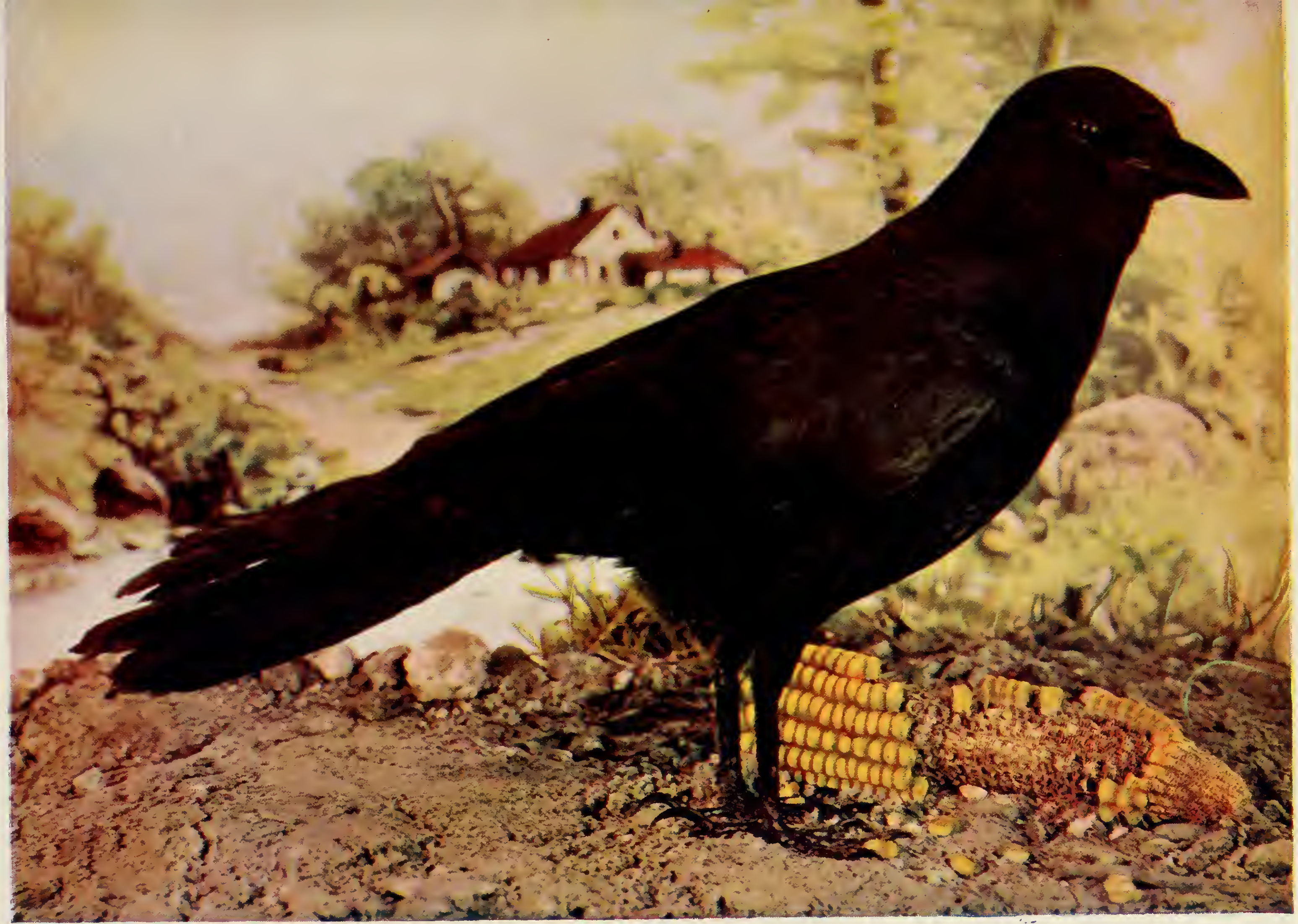
Perhaps you think I look very solemn and wise, and not at all as if I cared to play games. I do, though; and one of the games I like best is hide-and-seek. I play it with the farmer in the spring. He hides, in the rich, brown earth, golden kernels of corn. Surely he does it because he knows I like it, for sometimes he puts up a stick all dressed like a man to show where the corn is hidden. Sometimes I push my bill down into the earth to find the corn, and at other times I wait until tiny green leaves begin to show above the ground, and then I get my breakfast without much trouble. I wonder if the farmer enjoys this game as much as I do. I help him, too, by eating worms and insects.

During the spring and summer I live in my nest on the top of a very high tree. It is built of sticks and grasses and straw and string and anything else I can pick up. But in the fall, I and all my relations and friends live together in great roosts or rookeries. What good times we do have—hunting all day for food and talking all night. Wouldn't you like to be with us?

The farmer who lives in the house over there went to the mill to-day with a load of corn.

One of the ears dropped out of the wagon and it didn't take me long to find it. I have eaten all I can possibly hold and am wondering now what is the best thing to do. If you were in my place would you leave it here and not tell anybody and come back to-morrow and finish it? Or would you fly off and get Mrs. Crow and some of the children to come and finish it? I believe I'll fly and get them. Goodbye.

Caw! Caw! Caw!



CROW.
½ Life-size.

BOBOLINK.

Other birds may like to travel alone, but when jolly Mr. Bobolink and his quiet little wife come from the South, where they have spent the winter, they come with a large party of friends. When South, they eat so much rice that the people call them Rice Birds. When they come North, they enjoy eating wheat, barley, oats and insects.

Mr. and Mrs. Bobolink build their simple little nest of grasses in some field. It is hard to find on the ground, for it looks just like dry grass. Mrs. Bobolink wears a dull dress, so she cannot be seen when she is sitting on the precious eggs. She does not sing a note while caring for the eggs. Why do you think that is?

Mr. Bob-Linkum does not wear a sober dress, as you can see by his picture. He does not need to be hidden. He is just as jolly as he looks. Shall I tell you how he amuses his mate while she is sitting? He springs from the dew-wet grass with a sound like peals of merry laughter. He frolics from reed to post, singing as if his little heart would burst with joy.

Don't you think Mr. and Mrs. Bobolink look happy in the picture? They have raised their family of five. Four of their children have gone to look for food ; one of them—he must surely be the baby—would rather stay with his mamma and papa. Which one does he look like?

Many birds are quiet at noon and in the afternoon. A flock of Bobolinks can be heard singing almost all day long. The song is full of high notes and low, soft notes and loud, all sung rapidly. It is as gay and bright as the birds themselves, who flit about playfully as they sing. You will feel like laughing as merrily as they sing when you hear it some day.

THE BOBOLINK.

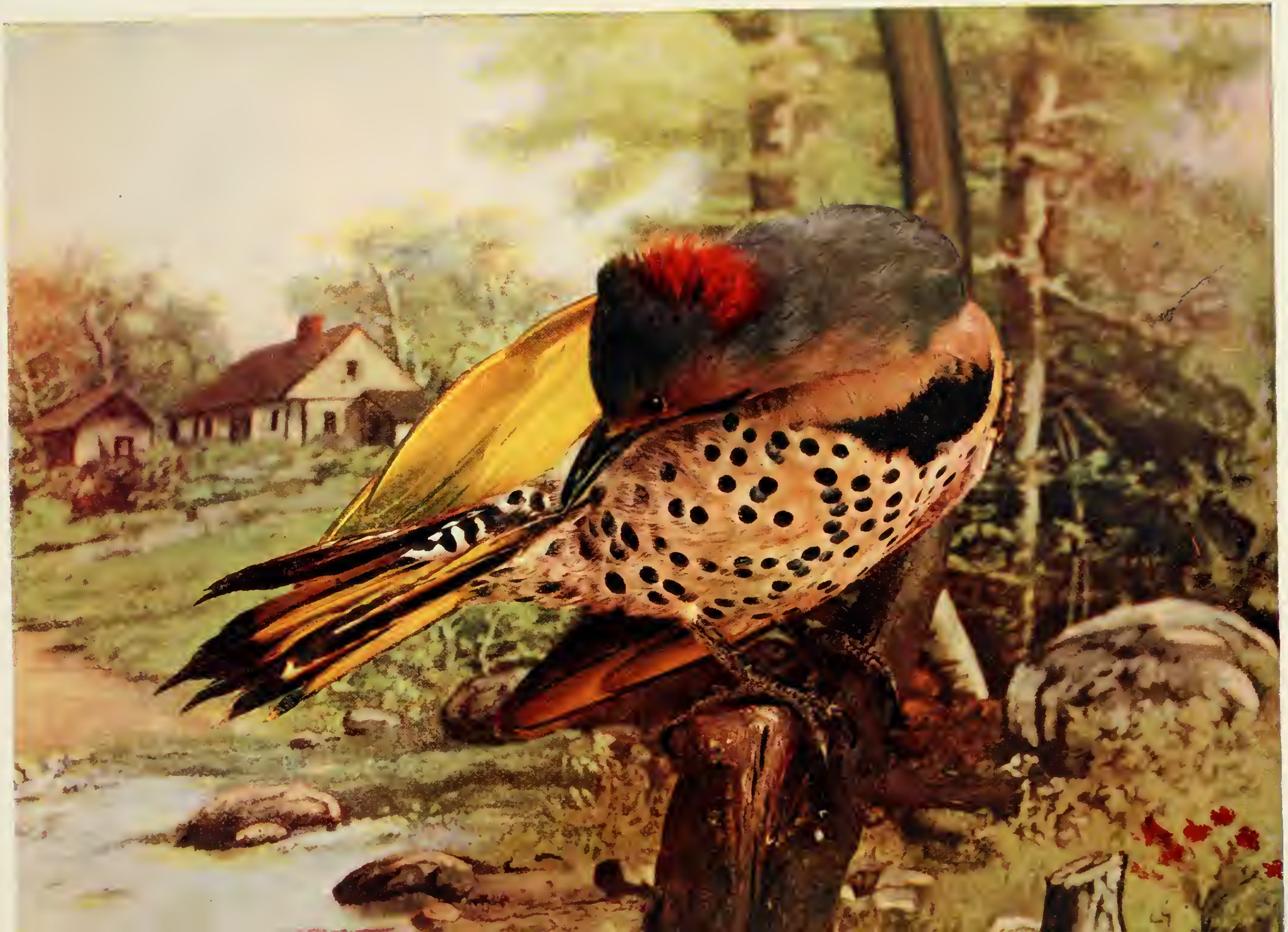
> "When Nature had made all her birds,
> And had no cares to think on,
> She gave a rippling laugh,
> And out there flew a Bobolinkou."

NO American ornithologist omits mention of the Bobolink, and naturalists generally have described him under one of the many names by which he is known. In some States he is called the Rice Bird, in others Reed Bird, the Rice or Reed Bunting, while his more familiar title, throughout the greater part of América, is Bobolink, or Bobolinkum. In Jamaica, where he gets very fat during his winter stay, he is called the Butter Bird. His title of Rice Troopial is earned by the depredations which he annually makes upon the rice crops, though his food "is by no means restricted to that seed, but consists in a large degree of insects, grubs, and various wild grasses." A migratory bird, residing during the winter in the southern parts of America, he returns in vast multitudes northward in the early Spring. According to Wilson, their course of migration is as follows: "In April, or very early in May, the Rice Buntings, male and female, arrive within the southern boundaries of the United States, and are seen around the town of Savannah, Georgia, sometimes in separate parties of males and females, but more generally promiscuously. They remain there but a short time, and about the middle of May make their appearance in the lower part of Pennsylvania. While here the males are extremely gay and full of song, frequenting meadows, newly plowed fields, sides of creeks, rivers, and watery places, feeding on May flies and caterpillars, of which they destroy great quantities. In their passage, however, through Virginia at this season, they do great damage to the early wheat and barley while in their milky state. About the 20th of May they disappear on their way to the North. Nearly at the same time they arrive in the State of New York, spread over the whole of the New England States, as far as the river St. Lawrence, and from Lake Ontario to the sea. In all of these places they remain during the Summer, building their nests and rearing their young."

The Bobolink's song is a peculiar one, varying greatly with the occasion. As he flys southward, his cry is a kind of clinking note; but the love song addressed to his mate is voluble and fervent. It has been said that if you should strike the keys of a pianoforte haphazard, the higher and the lower singly very quickly, you might have some idea of the Bobolink's notes. In the month of June he gradually changes his pretty, attractive dress and puts on one very like the females, which is of a plain rusty brown, and is not reassumed until the next season of nesting. The two parent birds in the plate represent the change from the dark plumage in which the bird is commonly known in the North as the Bobolink, to the dress of yellowish brown by which it is known throughout the South as the Rice or Reed Bird.

His nest, small and a plain one, too, is built on the ground by his industrious little wife. The inside is warmly lined with soft fibers of whatever may be nearest at hand. Five pretty white eggs, spotted all over with brown are laid, and as soon

> "As the little ones chip the shell
> And five wide mouths are ready for food,
> 'Robert of Lincoln' bestirs him well,
> Gathering seeds for this hungry brood."



THE FLICKER.

A GREAT variety of names does this bird possess. It is commonly known as the Golden Winged Woodpecker, Yellow-shafted Flicker, Yellow Hammer, and less often as High-hole or High-holer, Wake-up, etc. In suitable localities throughout the United States and the southern parts of Canada, the Flicker is a very common bird, and few species are more generally known. "It is one of the most sociable of our Woodpeckers, and is apparently always on good terms with its neighbors. It usually arrives in April, occasionally even in March, the males preceding the females a few days, and as soon as the latter appear one can hear their voices in all directions."

The Flicker is an ardent wooer. It is an exceedingly interesting and amusing sight to see a couple of males paying their addresses to a coy and coquettish female; the apparent shyness of the suitors as they sidle up to her and as quickly retreat again, the shy glances given as one peeps from behind a limb watching the other—playing bo-peep—seem very human, and "I have seen," says an observer, "few more amusing performances than the courtship of a pair of these birds." The defeated suitor takes his rejection quite philosophically, and retreats in a dignified manner, probably to make other trials elsewhere. Few birds deserve our good will more than the Flicker. He is exceedingly useful, destroying multitudes of grubs, larvæ, and worms. He loves berries and fruit but the damage he does to cultivated fruit is very trifling.

The Flicker begins to build its nest about two weeks after the bird arrives from the south. It prefers open country, interspersed with groves and orchards, to nest in. Any old stump, or partly decayed limb of a tree, along the banks of a creek, beside a country road, or in an old orchard, will answer the purpose. Soft wood trees seem to be preferred, however. In the prairie states it occasionally selects strange nesting sites. It has been known to chisel through the weather boarding of a dwelling house, barns, and other buildings, and to nest in the hollow space between this and the cross beams; its nests have also been found in gate posts, in church towers, and in burrows of Kingfishers and bank swallows, in perpendicular banks of streams. One of the most peculiar sites of his selection is described by William A. Bryant as follows: "On a small hill, a quarter of a mile distant from any home, stood a hay stack which had been placed there two years previously. The owner, during the winter of 1889-90, had cut the stack through the middle and hauled away one portion, leaving the other standing, with the end smoothly trimmed. The following spring I noticed a pair of flickers about the stack showing signs of wanting to make it a fixed habitation. One morning a few days later I was amused at the efforts of one of the pair. It was clinging to the perpendicular end of the stack and throwing out clipped hay at a rate to defy competition. This work continued for a week, and in that time the pair had excavated a cavity twenty inches in depth. They remained in the vicinity until autumn. During the winter the remainder of the stack was removed. They returned the following spring, and, after a brief sojourn, departed for parts unknown."

From five to nine eggs are generally laid. They are glossy white in color, and when fresh appear as if enameled.

The young are able to leave the nest in about sixteen days; they crawl about on the limbs of the tree for a couple of days before they venture to fly, and return to the nest at night.

THE RETURN OF THE BIRDS.

> "Everywhere the blue sky belongs to them and is their appointed rest, and their native country, and their own natural home which they enter unannounced as lords that are certainly expected, and yet there is a silent joy at their arrival.' '

THE return of the birds to their real home in the North, where they build their nests and rear their young, is regarded by all genuine lovers of earth's messengers of gladness and gayety as one of the most interesting and poetical of annual occurrences. The naturalist, who notes the very day of each arrival, in order that he may verify former observation or add to his material gathered for a new work, does not necessarily anticipate with greater pleasure this event than do many whose lives are brightened by the coming of the friends of their youth, who alone of early companions do not change. First of all—and ever the same delightful warbler—the Bluebird, who, in 1895, did not appear at all in many localities, though here in considerable numbers last year, betrays himself. "Did he come down out of the heaven on that bright March morning when he told us so softly and plaintively that, if we pleased, spring had come?" Sometimes he is here a little earlier, and must keep his courage up until the cold snap is over and the snow is gone. Not long after the Bluebird, comes the Robin, sometimes in March, but in most of the northern states April is the month of his arrival. With his first utterance the spell of winter is broken, and the remembrance of it afar off. Then appears the Woodpecker in great variety, the Flicker usually arriving first. He is always somebody's old favorite, "announcing his arrival by a long, loud call, repeated from the dry branch of some tree, or a stake in the fence—a thoroughly melodious April sound."

Few perhaps reflect upon the difficulties encountered by the birds themselves in their returning migrations. A voyager sometimes meets with many of our common birds far out at sea. Such wanderers, it is said, when suddenly overtaken by a fog, completely lose their sense of direction and become hopelessly lost. Humming birds, those delicately organized, glittering gems, are among the most common of the land species seen at sea.

The present season has been quite favorable to the protection of birds. A very competent observer says that not all of the birds migrated this winter. He recently visited a farm less than an hour's ride from Chicago, where he found the old place, as he relates it, "chucked full of Robins, Blackbirds, and Woodpeckers," and others unknown to him. From this he inferred they would have been in Florida had indications predicted a severe winter. The trees of the south parks of Chicago, and those in suburban places, have had, darting through their branches during the months of December and January, nearly as many members of the Woodpecker tribe as were found there during the mating season in May last.

Alas, that the Robin will visit us in diminished numbers in the approaching spring. He has not been so common for a year or two as he was formerly, for the reason that the Robins died by thousands of starvation, owing to the freezing of their food supply in Tennessee during the protracted cold weather in the winter of 1895. It is indeed sad that this good Samaritan among birds should be defenseless against the severity of Nature, the common mother of us all. Nevertheless the return of the birds, in myriads or in single pairs, will be welcomed more and more, year by year, as intelligent love and appreciation of them shall possess the popular mind.

THE BLACK TERN.

"THE TERN," says Mr. F. M. Woodruff, of the Chicago Academy of Sciences, "is the only representative of the long-winged swimmers which commonly nests with us on our inland fresh water marshes, arriving early in May in its brooding plumage of sooty black. The color changes in the autumn to white, and a number of the adult birds may be found, in the latter part of July, dotted and streaked here and there with white. On the first of June, 1891, I found a large colony of Black Terns nesting on Hyde Lake, Cook County, Illinois. As I approached the marsh a few birds were seen flying high in the air, and as I neared the nesting site, the flying birds gave notes of alarm, and presently the air was filled with the graceful forms of this beautiful little bird. They circled about me, darting down to within a few feet of my head, constantly uttering a harsh, screaming cry. As the eggs are laid upon the bare ground, which the brownish and blackish markings so closely resemble, I was at first unable to find the nests, and discovered that the only way to locate them was to stand quietly and watch the birds. When the Tern is passing over the nest it checks its flight, and poises for a moment on quivering wings. By keeping my eyes on this spot I found the nest with very little trouble. The complement of eggs, when the bird has not been disturbed, is usually three. These are laid in a saucer shaped structure of dead vegetation, which is scraped together, from the surface of the wet, boggy ground. The bird figured in the plate had placed its nest on the edge of an old muskrat house, and my attention was attracted to it by the fact that upon the edge of the rat house, where it had climbed to rest itself, was the body of a young dabchick, or piedbilled grebe, scarcely two and one-half inches long, and not twenty-four hours out of the egg, a beautiful little ball of blackish down, striped with brown and white. From the latter part of July to the middle of August large flocks of Black Terns may be seen on the shores of our larger lakes on their annual migration southward."

The Rev. P. B. Peabody, in alluding to his observation of the nests of the Tern, says: "Amid this floating sea of aquatic nests I saw an unusual number of well constructed homes of the Tern. Among these was one that I count a perfect nest. It rested on the perfectly flat foundation of a small decayed rat house, which was about fourteen inches in diameter. The nest, in form, is a truncated cone (barring the cavity), was about eight inches high and ten inches in diameter. The hollow—quite shallow—was about seven inches across, being thus unusually large. The whole was built up of bits of rushes, carried to the spot, these being quite uniform in length—about four inches." After daily observation of the Tern, during which time he added much to his knowledge of the bird, he pertinently asks: "Who shall say how many traits and habits yet unknown may be discovered through patient watching of community-breeding birds, by men enjoying more of leisure for such delightful studies than often falls to the lot of most of us who have bread and butter to earn and a tiny part of the world's work to finish?"

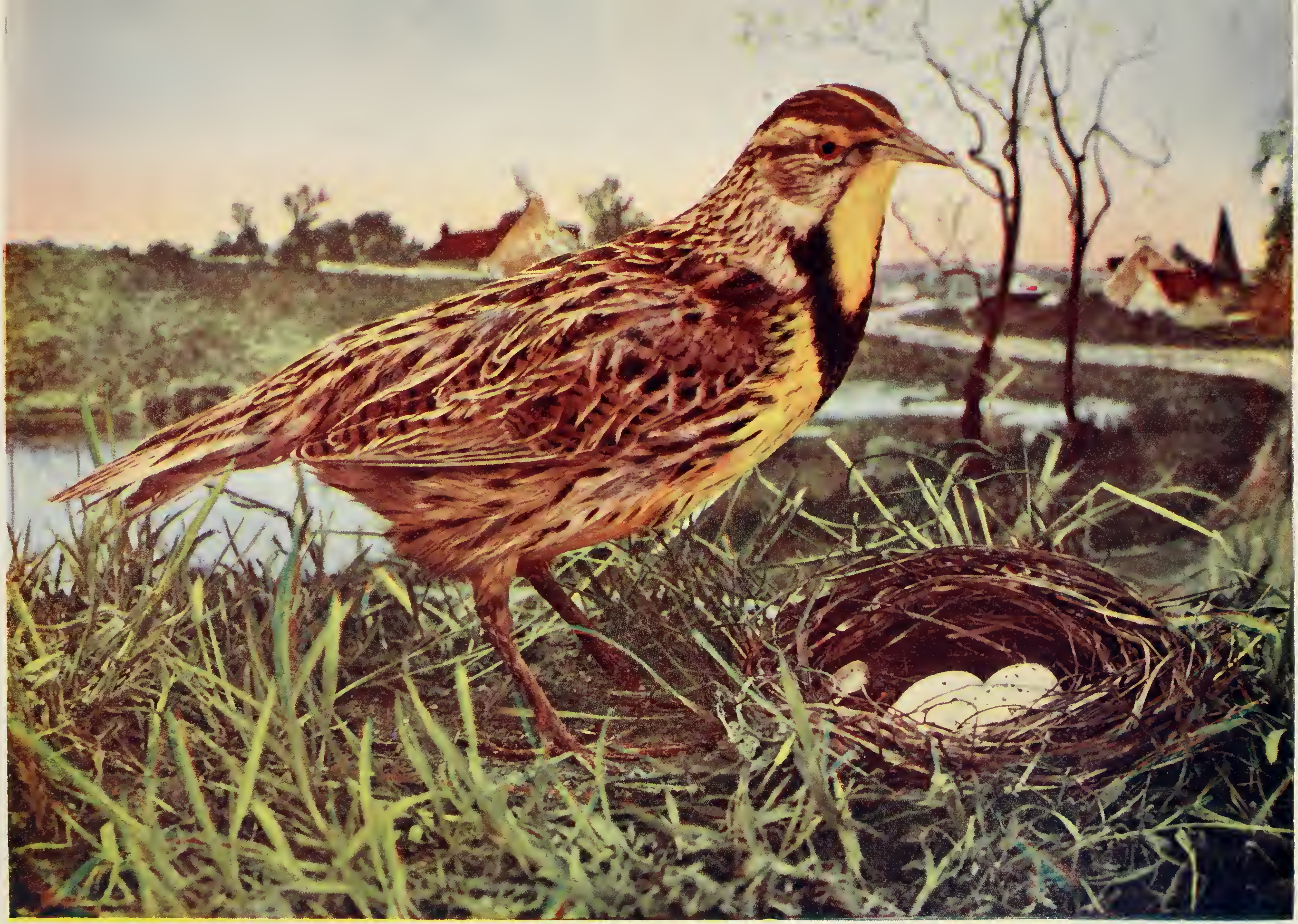
THE MEADOW LARK.

"Not an inch of his body is free from delight.
Can he keep himself still if he would? Oh, not he!
The music stirs in him like wind through a tree."

THE well known Meadow or Old Field Lark is a constant resident south of latitude 39, and many winter farther north in favorite localities. Its geographical range is eastern North America, Canada to south Nova Scota, Quebec, and Ontario to eastern Manitoba; west to Minnesota, Iowa, Missouri, eastern Kansas, the Indian Territory, and Texas; south to Florida and the Gulf coast, in all of which localities, except in the extreme north, it usually rears two or three broods in a season. In the Northern States it is only a summer resident, arriving in April and remaining until the latter part of October and occasionally November. Excepting during the breeding season, small flocks may often be seen roving about in search of good feeding grounds. Major Bendire says this is especially true in the fall of the year. At this time several families unite, and as many as two dozen may occasionally be flushed in a field, over which they scatter, roaming about independently of each other. When one takes wing all the others in the vicinity follow. It is a shy bird in the East, while in the middle states it is quite the reverse. Its flight is rather laborious, at least in starting, and is continued by a series of rapid movements of the wings, alternating with short distances of sailing, and is rarely protracted. On alighting, which is accompanied with a twitching of its tail, it usually settles on some fence rail, post, boudler, weedstock, or on a hillock in a meadow from which it can get a good view of the surroundings, and but rarely on a limb of a tree. Its favorite resorts are meadows, fallow fields, pastures, and clearings, but in some sections, as in northern Florida, for instance, it also frequents the low, open pine woods and nests there.

The song of the Meadow Lark is not much varied, but its clear, whistling notes, so frequently heard in the early spring, are melodious and pleasing to the ear. It is decidedly the farmers' friend, feeding, as it does, on noxious insects, caterpillers, moths, grasshoppers, spiders, worms and the like, and eating but little grain. The lark spends the greater part of its time on the ground, procuring all its food there. It is seldom found alone, and it is said remains paired for life.

Nesting begins in the early part of May and lasts through June. Both sexes assist in building the nest, which is always placed on the ground, either in a natural depression, or in a little hollow scratched out by the birds, alongside a bunch of grass or weeds. The nest itself is lined with dry grass, stubble, and sometimes pine needles. Most nests are placed in level meadows. The eggs and young are frequently destroyed by vermin, for the meadow lark has many enemies. The eggs vary from three to seven, five being the most common, and both sexes assist in the hatching, which requires about fifteen or sixteen days. The young leave the nest before they are able to fly—hiding at the slightest sign of danger. The Meadow Lark does not migrate beyond the United States. It is a native bird, and is only accidental in England. The eggs are spotted, blotched, and speckled with shades of brown, purple and lavender. A curious incident is told of a Meadow Lark trying to alight on the top mast of a schooner several miles at sea. It was evidently very tired but would not venture near the deck.



MEADOW LARK.

$^5/_6$ Life-size.

THE MEADOW LARK.

I told the man who wanted my picture that he could take it if he would show my nest and eggs. Do you blame me for saying so? Don't you think it makes a better picture than if I stood alone?

Mr. Lark is away getting me some breakfast, or he could be in the picture, too. After a few days I shall have some little baby birds, and then won't we be happy.

Boys and girls who live in the country know us pretty well. When they drive the cows out to pasture, or when they go out to gather wild flowers, we sit on the fences by the roadside and make them glad with our merry song.

Those of you who live in the city cannot see us unless you come out into the country.

It isn't very often that we can find such a pretty place for a nest as we have here. Most of the time we build our nest under the grass and cover it over, and build a little tunnel leading to it. This year we made up our minds not to be afraid.

The people living in the houses over there do not bother us at all and we are so happy.

You never saw baby larks, did you? Well, they are queer little fellows, with hardly any feathers on them.

Last summer we had five little birdies to feed, and it kept us busy from morning till night. This year we only expect three, and Mr. Lark says he will do all the work. He knows a field that is being plowed, where he can get nice, large worms.

Hark! that is he singing. He will be surprised when he comes back and finds me off the nest. He is so afraid that I will let the eggs get cold, but I won't. There he comes, now.

THE LONG-EARED OWL.

THE name of the Long-Eared Owl is derived from the great length of his "ears" or feather-tufts, which are placed upon the head, and erect themselves whenever the bird is interested or excited. It is the "black sheep" of the owl family, the majority of owls being genuine friends of the agriculturist, catching for his larder so many of the small animals that prey upon his crops. In America he is called the Great Horned Owl—in Europe the Golden Owl.

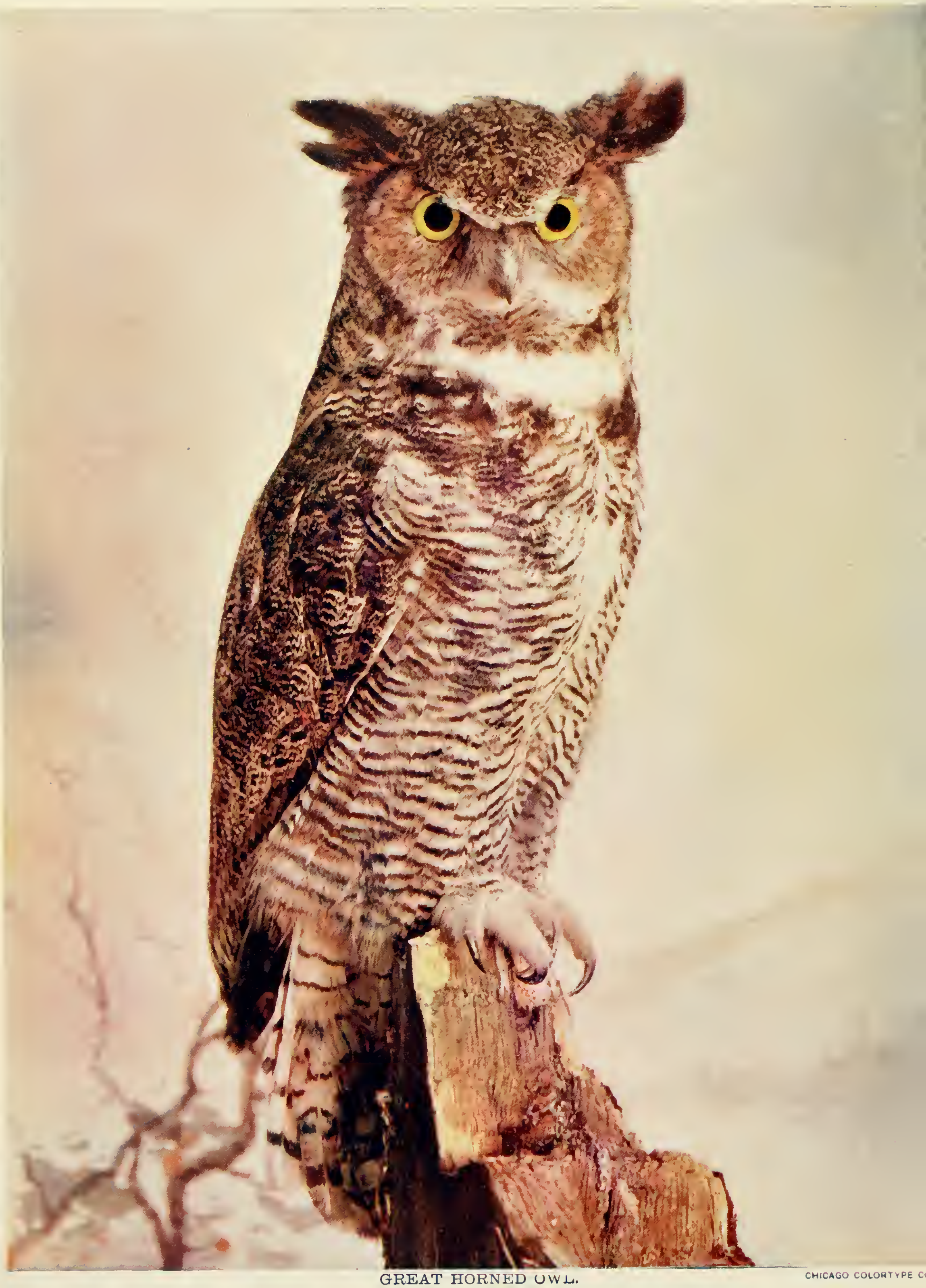
Nesting time with the owl begins in February, and continues through March and April. The clown-like antics of both sexes of this bird while under the tender influence of the nesting season tend somewhat to impair their reputation for dignity and wise demeanor. They usually have a simple nest in a hollow tree, but which seems seldom to be built by the bird itself, as it prefers to take the deserted nest of some other bird, and to fit up the premises for its own use. They repair slightly from year to year the same nest. The eggs are white, and generally four or five in number. While the young are still in the nest, the parent birds display a singular diligence in collecting food for them.

If you should happen to know of an owl's nest, stand near it some evening when the old birds are rearing their young. Keep quiet and motionless, and notice how frequently the old birds feed them. Every ten minutes or so the soft flap, flap of their wings will be heard, the male and female alternately, and you will obtain a brief glimpse of them through the gloom as they enter the nesting place. They remain inside but a short time, sharing the food equally amongst their brood, and then are off again to hunt for more. All night, were you to have the inclination to observe them, you would find they pass to and fro with food, only ceasing their labors at dawn. The young, as soon as they reach maturity, are abandoned by their parents; they quit the nest and seek out haunts elsewhere, while the old birds rear another, and not infrequently two more broods, during the remainder of the season.

The habits of the Long-Eared Owl are nocturnal. He is seldom seen in the light of day, and is greatly disturbed if he chance to issue from his concealment while the sun is above the horizon. The facial disk is very conspicuous in this species. It is said that the use of this circle is to collect the rays of light, and throw them upon the eye. The flight of the owl is softened by means of especially shaped, recurved feather-tips, so that he may noiselessly steal upon his prey, and the ear is also so shaped as to gather sounds from below.

The Long-Eared Owl is hardly tamable. The writer of this paragraph, when a boy, was the possessor, for more than a year, of a very fine specimen. We called him Judge. He was a monster, and of perfect plumage. Although he seemed to have some attachment to the children of the family who fed him, he would not permit himself to be handled by them or by any one in the slightest. Most of his time he spent in his cage, an immense affair, in which he was very comfortable. Occasionally he had a day in the barn with the rats and mice.

The owl is of great usefulness to gardener, agriculturist, and landowner alike, for there is not another bird of prey which is so great a destroyer of the enemies of vegetation.



GREAT HORNED OWL.
$^3/_7$ Life-size.

CHICAGO COLORTYPE CO

THE OWL.

We know not alway
Who are kings by day,
But the king of the night is the bold brown owl!

I wonder why the folks put my picture last in the book. It can't be because they don't like me, for I'm sure I never bother them. I don't eat the farmer's corn like the crow, and no one ever saw me quarrel with other birds.

Maybe it is because I can't sing. Well, there are lots of good people that can't sing, and so there are lots of good birds that can't sing.

Did you ever see any other bird sit up as straight as I do? I couldn't sit up so straight if I hadn't such long, sharp claws to hold on with.

My home is in the woods. Here we owls build our nests—most always in hollow trees.

During the day I stay in the nest or sit on a limb. I don't like day time for the light hurts my eyes, but when it begins to grow dark then I like to stir around. All night long I am wide awake and fly about getting food for my little hungry ones. They sleep most of the day and it keeps me busy nearly all night to find them enough to eat.

I just finished my night's work when the man came to take my picture. It was getting light and I told him to go to a large stump on the edge of the woods and I would sit for my picture. So here I am. Don't you think I look wise? How do you like my large eyes? If I could smile at you I would, but my face always looks sober. I have a great many cousins and if you really like my picture, I'll have some of them talk to you next month. I don't think any of them have such pretty feathers though. Just see if they have when they come.

Well, I must fly back to my perch in the old elm tree. Good-bye.

THE OWL.

In the hollow tree, in the old gray tower,
  The spectral owl doth dwell;
Dull, hated, despised in the sunshine hour,
  But at dusk he's abroad and well!
Not a bird of the forest e'er mates with him;
  All mock him outright by day;
But at night, when the woods grow still and dim,
  The boldest will shrink away!

    O! when the night falls, and roosts the fowl,
    Then, then, is the reign of the Horned Owl!

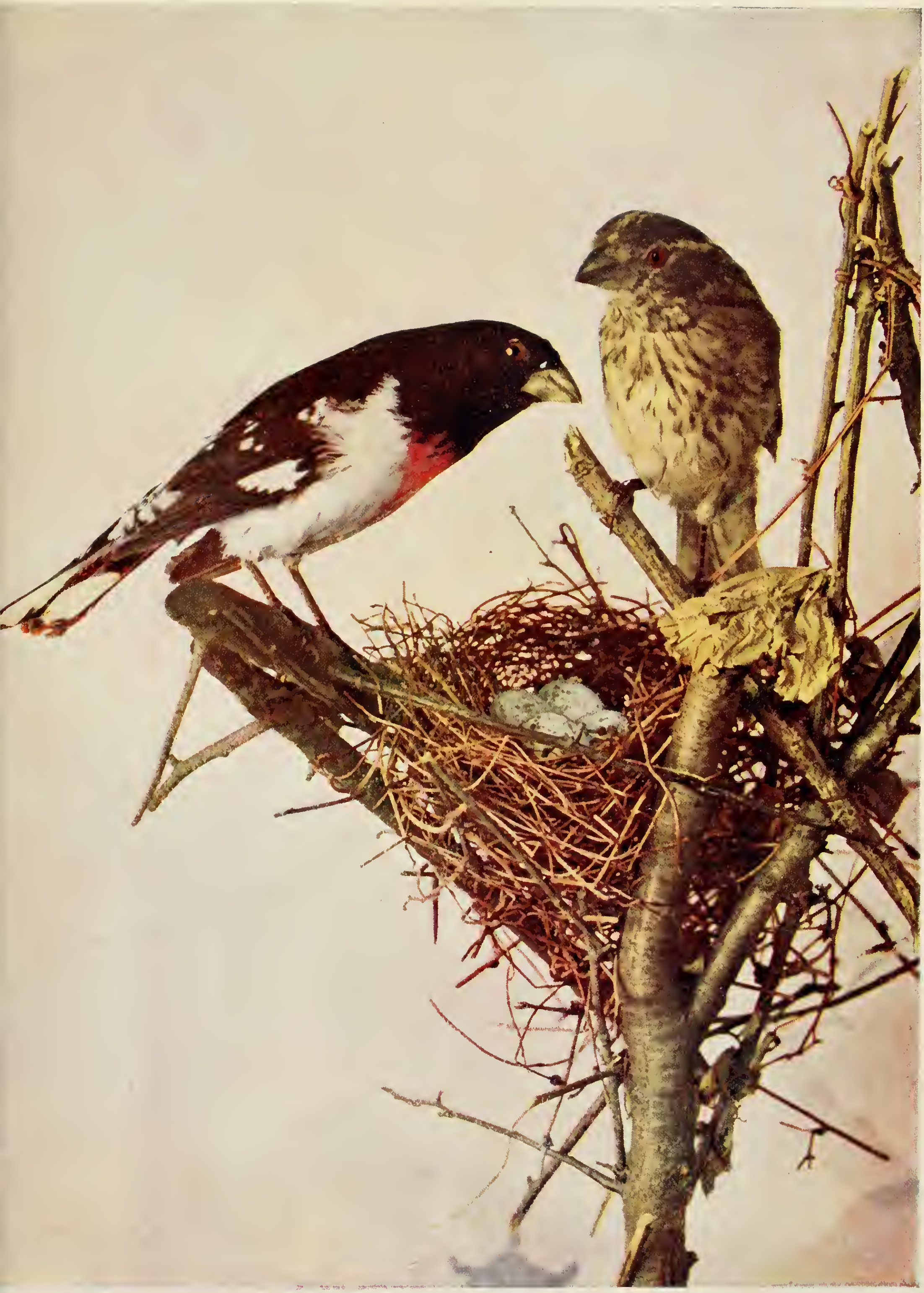
And the owl hath a bride, who is fond and bold,
  And loveth the wood's deep gloom;
And, with eyes like the shine of the moonstone cold,
  She awaiteth her ghastly groom.
Not a feather she moves, not a carol she sings,
  As she waits in her tree so still,
But when her heart heareth his flapping wings,
  She hoots out her welcome shrill!

    O! when the moon shines, and dogs do howl,
    Then, then, is the joy of the Horned Owl!

Mourn not for the owl, nor his gloomy plight!
  The owl hath his share of good—
If a prisoner he be in the broad daylight,
  He is lord in the dark greenwood!
Nor lonely the bird, nor his ghastly mate,
  They are each unto each a pride;
Thrice fonder, perhaps, since a strange, dark fate
  Hath rent them from all beside!

    So, when the night falls, and dogs do howl,
    Sing, Ho! for the reign of the Horned Owl!
        We know not alway
        Who are kings by day,
But the King of the Night is the bold Brown Owl!

Bryan W. Procter
(Barry Cornwall.)



ROSE-BREASTED GROSSBEAKS.
9/16 Life-size.

THE ROSE-BREASTED GROSBEAK.

THIS is an American bird, and has been described under various names by various authors. It is found in the lower parts of Pennsylvania, in the state of New York, and in New England, particularly in autumn, when the berries of the sour gum are ripe, on the kernels of which it eagerly feeds. As a singer it has few superiors. It frequently sings at night, and even all night, the notes being extremely clear and mellow. It does not acquire its full colors until at least the second spring or summer. It is found as far east as Nova Scotia, as far west as Nebraska, and winters in great numbers in Guatemala. This Grosbeak is common in southern Indiana, northern Illinois, and western Iowa. It is usually seen in open woods, on the borders of streams, but frequently sings in the deep recesses of forests. In Mr. Nuttall's opinion this species has no superior in song, except the Mocking Bird.

The Rose-Breasted Grosbeaks arrive in May and nest early in June. They build in low trees on the edges of woods, frequently in small groves on the banks of streams. The nest is coarsely built of waste stubble, fragments of leaves, and stems of plants, intermingled with and strengthened by twigs and coarser stems. It is eight inches wide, and three and a half high, with a cavity three inches in diameter and one in depth, being quite shallow for so large a nest.

Dr. Hoy, of Racine, states that on the 15th of June, within six miles of that city, he found seven nests, all within a space of not over five acres, and he was assured that each year they resort to the same locality and nest in this social manner. Six of these nests were in thorn-trees, all were within six to ten feet of the ground, near the center of the top. Three of the four parent birds sitting on the nests were males. When a nest was disturbed, all the neighboring Grosbeaks gathered and appeared equally interested.

It is frequently observed early in the month of March, making its way eastward. At this period it passes at a considerable height in the air. On the banks of the Schuylkill, early in May, it has been seen feeding on the tender buds of trees. It eats various kinds of food, such as hemp-seed, insects, grasshoppers, and crickets with peculiar relish. It eats flies and wasps, and great numbers of these pests are destroyed by its strong bill. During bright moonshiny nights the Grosbeak sings sweetly, but not loudly. In the daytime, when singing, it has the habit of vibrating its wings, in the manner of the Mocking-bird.

The male takes turns with his mate in sitting on the eggs. He is so happy when on the nest that he sings loud and long. His music is sometimes the cause of great mourning in the lovely family because it tells the egg hunter where to find the precious nest.

THE CANADA JAY.

I don't believe I shall let this bird talk to you, boys and girls, for I'm afraid he will not tell you what a funny fellow he is. Isn't he a queer looking bird? See how ruffled up his feathers are. He looks as though he forgot to fix up, just as some little boys forget to comb their hair before going to school.

Well, to tell the truth, he is a very careless bird and does very funny things sometimes. He can't be trusted.

Just listen to some of the names that people give him—"Meat Bird," "Camp Robber." I think you can guess why he is called those names.

Hunters say that he is the boldest of birds, and I think they are right, for what bird would dare to go right into a tent and carry off things to eat.

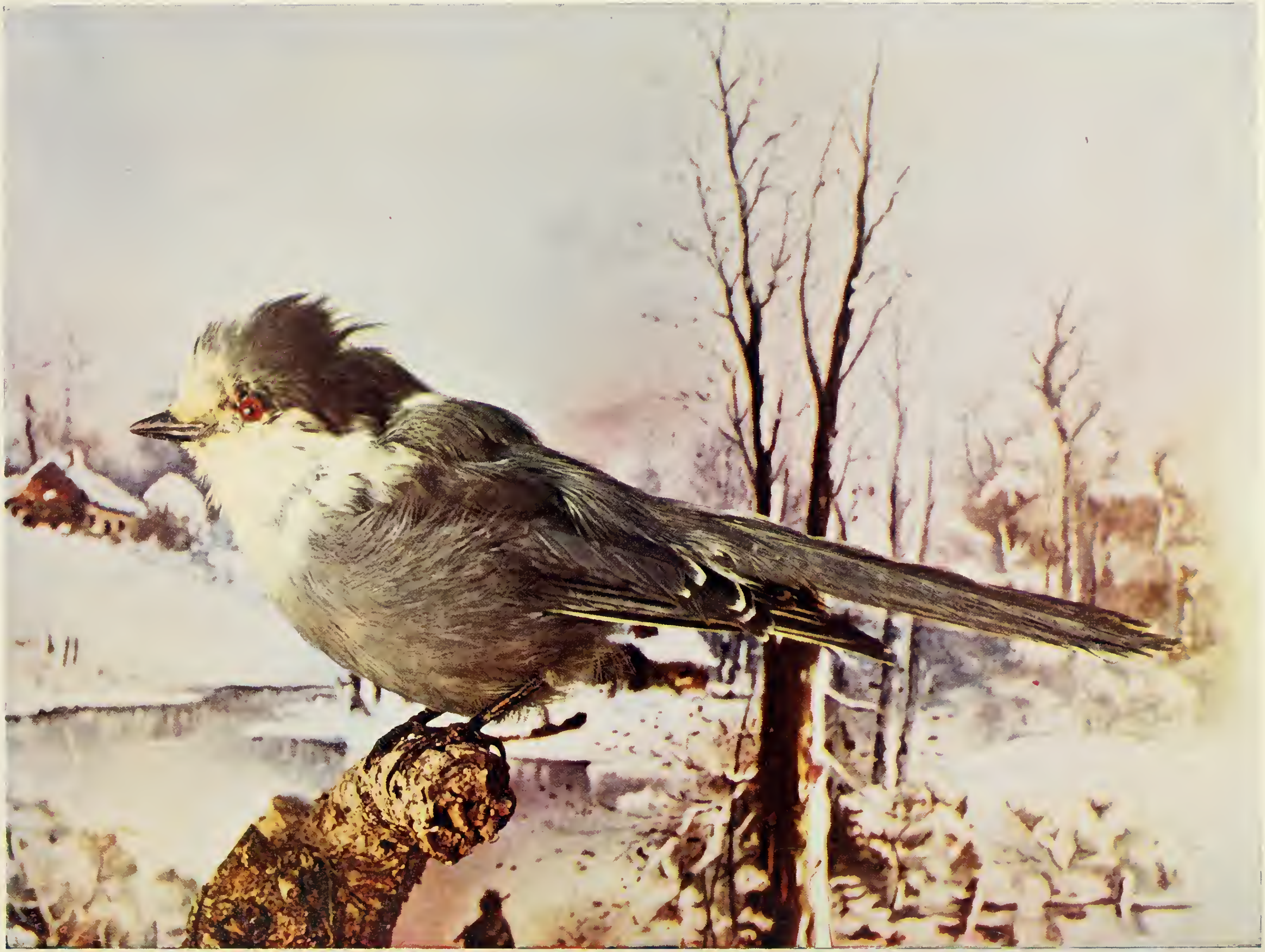
A hunter thought he would play a joke on one of these birds. He had a small paper sack of crackers in the bottom of his boat. The Jay flew down, helped himself to a cracker and flew away with it to his nest. While he was gone the hunter tied up the mouth of the bag.

In a few moments the Jay was back for more. When he saw he could not get into the bag, he just picked it up and carried it off. The joke was on the hunter after all. Look at him. Doesn't he look bold enough to do such a trick?

Look back at your February number of "Birds" and see if he is anything like the Blue Jay.

He is not afraid of the snow and often times he and his mate have built their nest, and the eggs are laid while there is still snow on the ground. Do you know of any other birds who build their nests so early?

There is one thing about this bird which we all admire—he is always busy, never idle; so we will forgive him for his funny tricks.



THE CANADA JAY.

MANY will recognize the Canada Jay by his local names, of which he has a large assortment. He is called by the guides and lumbermen of the Adirondack wilderness, "Whisky Jack" or "Whisky John," a corruption of the Indian name, "Wis-ka-tjon," "Moose Bird," "Camp Robber," "Hudson Bay Bird," "Caribou Bird," "Meat Bird," "Grease Bird," and "Venison Heron." To each of these names his characteristics have well entitled him.

The Canada Jay is found only in the more northern parts of the United States, where it is a resident and breeds. In northern Maine and northern Minnesota it is most common; and it ranges northward through the Dominion of Canada to the western shores of Hudson Bay, and to the limit of timber within the Arctic Circle east of the Rocky Mountains.

Mr. Manly Hardy, in a special bulletin of the Smithsonian Institution, says, "They are the boldest of our birds, except the Chickadee, and in cool inpudence far surpass all others. They will enter the tents, and often alight on the bow of a canoe, where the paddle at every stroke comes within eighteen inches of them. I know nothing which can be eaten that they will not take, and I had one steal all my candles, pulling them out endwise, one by one, from a piece of birch bark in which they were rolled, and another pecked a large hole in a keg of castile soap. A duck which I had picked and laid down for a few minutes had the entire breast eaten out by one or more of these birds. I have seen one alight in the middle of my canoe and peck away at the carcess of a beaver I had skinned. They often spoil deer saddles by pecking into them near the kidneys. They do great damage to the trappers by stealing the bait from traps set for martens and minks, and by eating trapped game. They will sit quietly and see you build a log trap and bait it, and then, almost before your back is turned, you hear their hateful "Ca-ca-ca," as they glide down and peer into it. They will work steadily, carrying off meat and hiding it. I have thrown out pieces, and watched one to see how much he would carry off. He flew across a wide stream and in a short time looked as bloody as a butcher from carrying large pieces; but his patience held out longer than mine. I think one would work as long as Mark Twain's California Jay did trying to fill a miner's cabin with acorns through a knot hole in the roof. They are fond of the berries of the mountain ash, and, in fact, few things come amiss; I believe they do not possess a single good quality except industry."

Its flight is slow and laborious, while it moves on the ground and in trees with a quickness and freedom equal to that of our better known Bluejay.

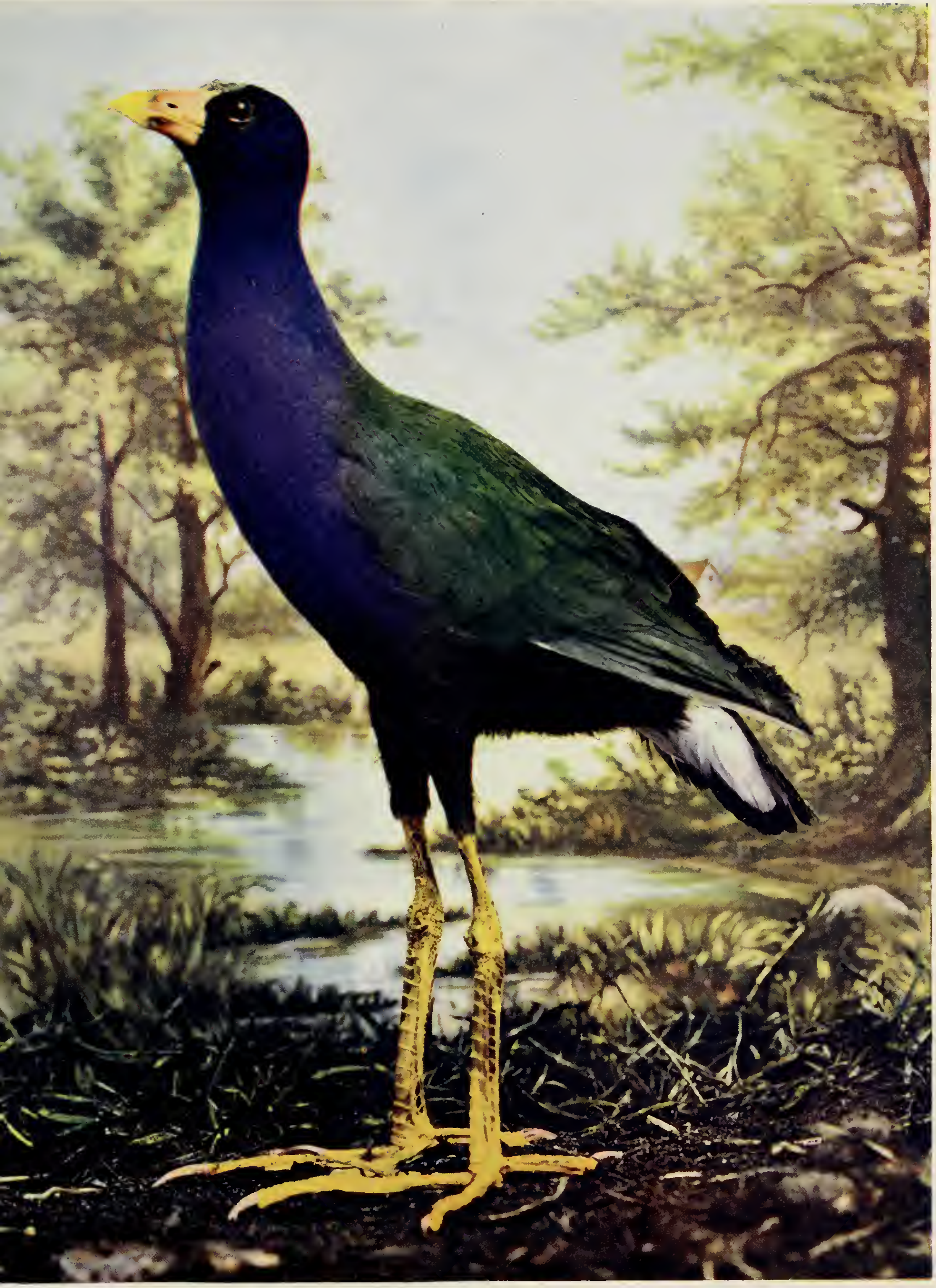
The nesting season begins early, before the snow has disappeared, and therefore comparatively little is known about its breeding habits. It is then silent and retiring and is seldom seen or heard. The nest is quite large, made of twigs, fibres, willow bark, and the down of the cottonwood tree, and lined with finer material. The eggs, so far as is known, number three or four. They are of a pale gray color, flecked and spotted over the surface with brown, slate gray, and lavender.

THE PURPLE GALLINULE.

PURPLE Gallinules are found in the South Atlantic and Gulf States, and casually northward as far as Maine, New York, Wisconsin, and south throughout the West Indies, Mexico, Central America, and northern South America to Brazil. The bird pictured was caught in the streets of Galveston, Texas, and presented to Mr. F. M. Woodruff, of the Chicago Academy of Sciences. Gallinules live in marshy districts, and some of them might even be called water-fowls. They usually prefer sedgy lakes, large swampy morasses and brooks, or ponds and rivers well stocked with vegetation. They are not social in disposition, but show attachment to any locality of which they have taken possession, driving away other birds much larger and stronger than themselves. They are tenderly attached to their little ones and show great affection for each other. The nest is always built among, or near the water plants of which they are fond. It is about eight inches thick and fifteen to eighteen inches in diameter, and is placed from a foot to two feet out of water among the heavy rushes. The Purple Gallinule is known to build as many as five or six sham nests, a trait which is not confined to the Wren family. From four to twelve smooth shelled and spotted eggs are laid, and the nestlings when first hatched are clad in dark colored down. On leaving the nest they, accompanied by their parents, seek a more favorable situation until after the moulting season. Half fluttering and half running, they are able to make their way over a floating surface of water-plants. They also swim with facility, as they are aquatic, having swimming membranes on their feet, and while vegetable feeders to some extent, they dive for food. It is noted that some Gallinules, when young, crawl on bushes by wing claws. The voice somewhat resembles the cackling or clucking of a hen. It eats the tender shoots of young corn, grass, and various kinds of grain. When the breeding season approaches, the mated pairs generally resort to rice fields, concealing themselves among the reeds and rushes. Mr. Woodruff noted that when the railway trains pass through the over-flowed districts about Galveston, the birds fly up along the track in large multitudes.

The Purple Gallinules are stoutly built birds, with a high and strong bill, and their remarkably long toes, which enable them to walk readily over the water plants, are frequently employed to hold the food, very much in the manner of a parrot, while eating.

O, purple-breasted Gallinule
Why should thy beauty cause thee fear?
Why should the huntsman seek to fool
Thy inocence, and bring thee near
His deadly tool of fire and lead?
Thou holdest high thy stately head!
Would that the hunter might consent
To leave thee in thy sweet content.—C. C. M.



n col. F. M. Woodruff.

PURPLE GALLINULE.

BIRD DAY IN THE SCHOOLS.

BIRD DAY! Have you heard of it? Whether you have or not, we wish to assure you that it is worthy the thoughtful consideration of all teachers, and of all others interested in protecting and preserving our sweet birds.

Bird day has already proved a great success in two cities of the United States, both in the enthusiasm shown by the children in their friendly study of birds and in the result of such study.

In 1894, Oil City, Pa., observed the day, and in 1896 it was celebrated in the schools of Fort Madison, Iowa.

Of the results in his schools, Supt. Babcock, of Oil City, says, "There has been a complete change in the relations existing between the small boy and the birds."

Although we in Fort Madison have been engaged in bird study less than a year, and have observed but one BIRD DAY, results similar to those secured by Supt. Babcock are becoming manifest. Only a few days ago a boy said to his teacher, "I used to take pleasure in killing all kinds of birds. Now I don't wish to harm even an English Sparrow."

The object of BIRD DAY and the study that leads to it, is to diffuse a true knowledge of the aesthetic and practical value of birds and to arouse an interest in bird protection.

And it is high time that something be done. From all over the country come reports of a decrease in native birds. In many places some of our sweetest songsters and most useful insect destroyers have become very scarce or have disappeared entirely. The causes are many, but the greatest is an inexcusable thoughtlessness on the part of young and old of both sexes. Johnny teases for a gun. His fond parents get it for him. Result—Johnny shows his marksmanship by shooting several birds in his vicinity. Or, perhaps, the ladies need new hats. Nothing except birds for trimming will do, though ten thousand sweet songs be hushed forever.

The study of bird life is one of especial interest to children and if properly pursued will develop in them sympathetic characters that should make them kinder towards their playmates now and towards their fellowmen in the coming years.

Impress upon a child that

> "He liveth best who loveth best
> All things, both great and small,"

and you have built into his life something that shall shine forth in good deeds through countless ages.

And how go about this work? The limit of space allotted this article forbids a full answer. Briefly,—study the birds themselves. Get a boy aroused to a friendly, protective interest in one bird and you have probably made that boy a friend of all birds. If you are a teacher, take your little flock out early some bright, Spring morning and let them listen to the singing of their feathered brothers of the air. Call attention to their beauty and grace of form, plumage and movement. Watch them care for their little ones. Notice their nests—their happy little homes—those "half-way houses on the road to heaven," and as you and your flock wander, watch and listen and call to mind that,

"'Tis always morning somewhere, and above
The awakening continents, from shore to shore,
Somewhere the birds are singing evermore."

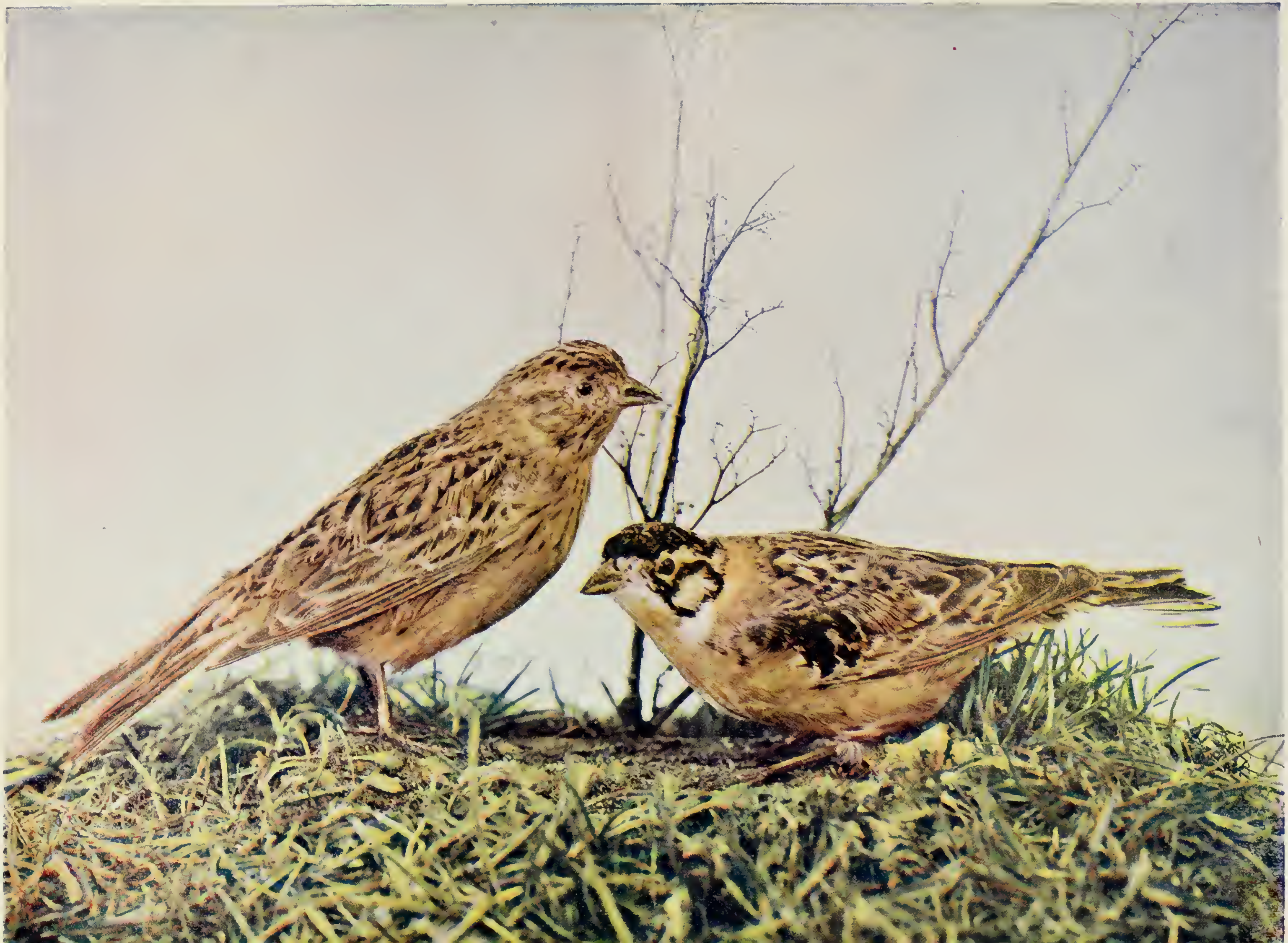
Let us, fellow teachers and fellow citizens of America, take up this work of bird study and bird protection. Let the schools teach it, the press print it, and the pulpit preach it, till from thousands of happy throats shall be proclaimed the glad tidings of good will of man towards the birds.

C. H. Morrill,
Supt. of Schools.

Fort Madison, Iowa.

LOVE FOR ANIMALS.

Amongst the many beautiful stories told of St. Francis of Assisi, none are more interesting and striking than those concerning his love for animals, and tenderness towards them. How he loved the birds, and called them his sisters; how they used to come to him whilst he spoke to and blessed them; how he saved a pigeon from the hands of a boy who was going to kill it; how he spoke of it as an emblem of innocence and purity, and made a nest for it and watched over it and its young ones; how he had pity on a poor wolf, and tamed it and caused it to follow him; and also how he thought of the fishes, and blessed them.



SMITH'S PAINTED LONGSPUR.

SMITH'S Painted Longspur is usually considered a rare bird in the middle west, but a recent observer found it very common in the fields. He saw twenty-five on October 3rd of last year. They were associated with a large flock of Lapland Longspurs. On account of its general resemblance to the latter species it is often overlooked. It is found in the interior of North America from the Arctic coast to Illinois and Texas, breeding far north, where it has a thick, fur-lined, grass nest, set in moss on the ground. Like the Lapland Longspur, it is only a winter visitor. It is not so generally distributed as that species, the migrations being wholly confined to the open prairie districts. Painted Longspurs are generally found in large flocks, and when once on the ground begin to sport. They run very nimbly, and when they arise utter a sharp click, repeated several times in quick succession, and move with an easy undulating motion for a short distance, when they alight very suddenly, seeming to fall perpendicularly several feet to the ground. They prefer the roots where the grass is shortest. When in the air they fly in circles, to and fro, for a few minutes, and then alight, keeping up a constant chirping or call. They seem to prefer the wet portions of the prairie. In the breeding seasons the Longspur's song has much of charm, and is uttered like the Skylark's while soaring. The Longspur is a ground feeder, and the mark of his long hind claw, or spur, can often be seen in the new snow. In 1888 the writer saw a considerable flock of Painted Longspurs feeding along the Niagara river near Fort Erie, Canada.

The usual number of eggs found in a nest is four or five, and the nests, for the most part, are built of fine dry grasses, carefully arranged and lined with down, feathers, or finer materials similar to those of the outer portions. They are sometimes sunk in an excavation made by the birds, or in a tuft of grass, and in one instance, placed in the midst of a bed of Labrador tea. When the nest is approached, the female quietly slips off, while the male bird may be seen hopping or flying from tree to tree in the neighborhood of the nest and doing all he can to induce intruders to withdraw from the neighborhood. The eggs have a light clay-colored ground, marked with obscure blotches of lavender and darker lines, dots, and blotches of purplish brown. The Longspur is a strong flier, and seems to delight in breasting the strongest gales, when all the other birds appear to move with difficulty, and to keep themselves concealed among the grass. While the colors of adult males are very different in the Longspur family, the females have a decided resemblance. The markings of the male are faintly indicated, but the black and buff are wanting.

THE AMERICAN CROSS BILL.

AMERICAN CROSSBILLS are notable for their small size, being considered and described as dwarfs of the family. Their food consists exclusively of pine, fir, and larch, which accounts for the fact that they are more numerous in Northern latitudes where these trees abound. When the cones are abundant they visit in great numbers many places where they have not been for years, appearing at irregular intervals, and not confining themselves to particular localities.

They are very social even during the nesting season. Their nests are built among the branches of the fir trees, and there they disport themselves gaily, climbing nimbly, and assisting their movements, as parrots do, with their beaks. They will hang downward for minutes clinging to a twig or cone, seeming to enjoy this apparently uncomfortable position. They fly rapidly, but never to a great distance. "The pleasure they experience in the society of their mates is often displayed by fluttering over the tops of the trees as they sing, after which they hover fora time, and then sink slowly to their perch. In the day time they are generally in motion, with the exception of a short time at noon. During the spring, summer and autumn they pass their time in flying from one plantation to another."

The Crossbill troubles itself but little about the other inhabitants of the woods, and is said to be almost fearless of man. Should the male lose his mate, he will remain sorrowfully perched upon the branch from which his little companion has fallen; again and again visit the spot in the hope of finding her; indeed it is only after repeated proofs that she will never return that he begins to show any symptoms of shyness.

In feeding the Crossbill perches upon a cone with its head downwards, or lays the cone upon a branch and stands upon it, holding it fast with his sharp, strong pointed claws. Sometimes it will bite off a cone and carry it to a neighboring bough, or to another tree where it can be opened, for a suitable spot is not to be found on every branch.

The nest is formed of pine twigs, lined with feathers, soft grass, and the needle-like leaves of the fir tree. Three or four eggs of a grayish or bluish white color, streaked with faint blood red, reddish brown, or bluish brown spots, are generally laid.

The following poem is quite a favorite among bird lovers, and is one of those quaint legends that will never die.

THE LEGEND OF THE CROSSBILL.

From the German of Julius Mosen, by Longfellow.

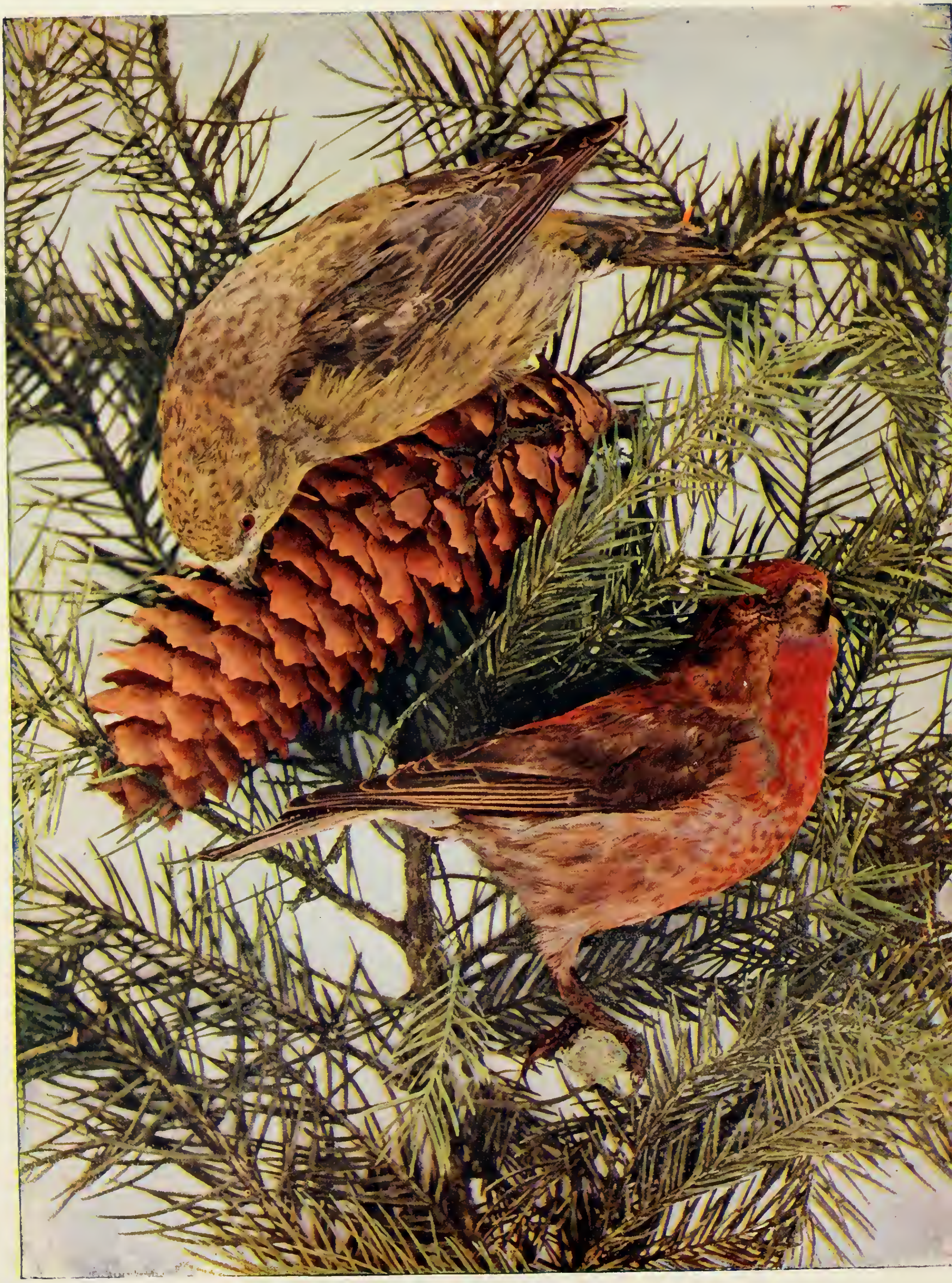
On the cross the dying Saviour
Heavenward lifts his eyelids calm,
Feels, but scarcely feels, a trembling
In his pierced and bleeding palm.

And by all the world forsaken,
Sees he how with zealous care
At the ruthless nail of iron
A little bird is striving there.

Stained with blood and never tiring,
With its beak it doth not cease,
From the cross it would free the Saviour,
Its Creator's son release.

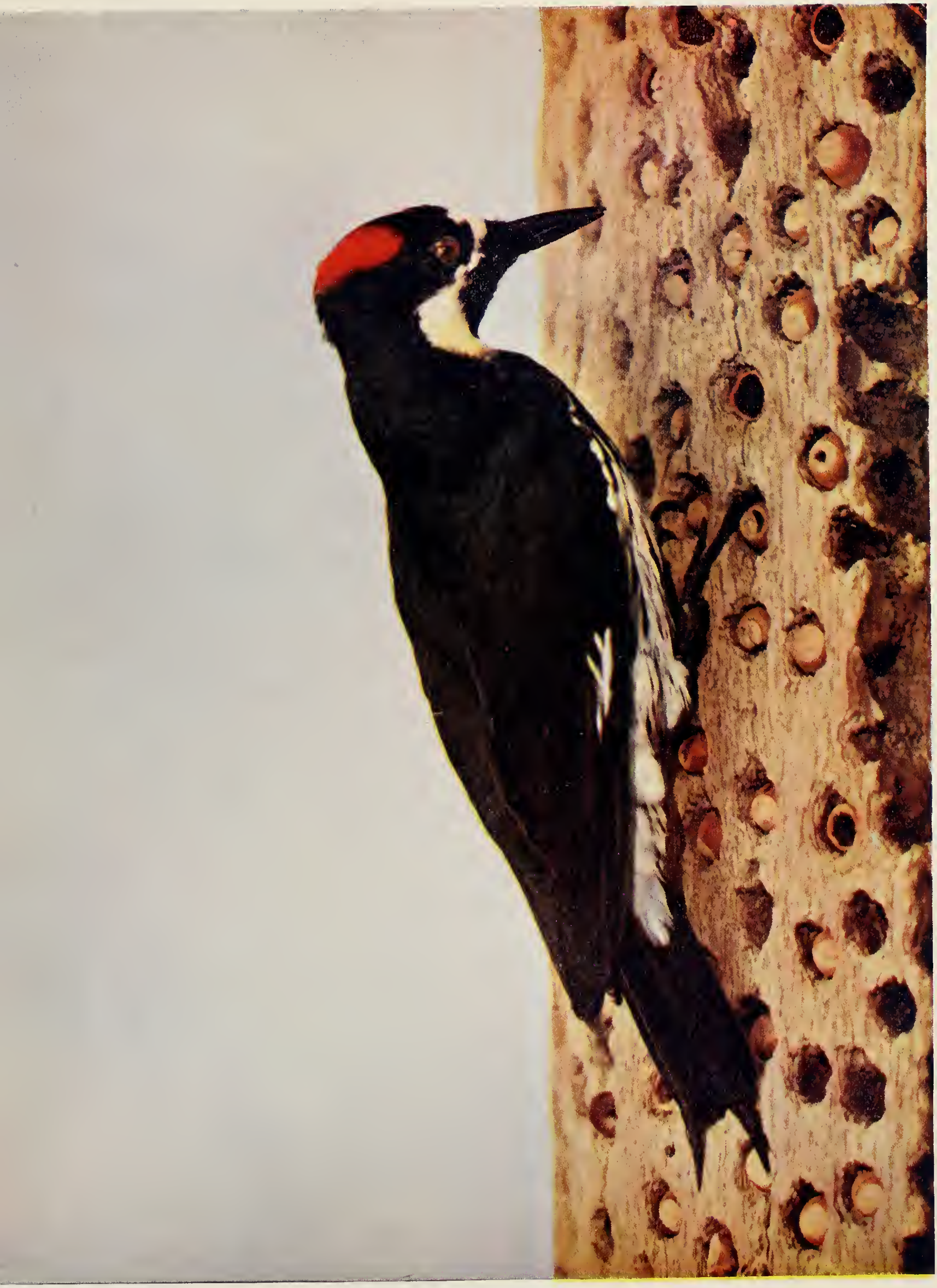
And the Saviour speaks in mildness:
"Blest be thou of all the good!
Bear, as token of this moment,
Marks of blood and holy rood!"

And that bird is called the Crossbill,
Covered all with blood so clear,
In the groves of pine it singeth,
Songs, like legends, strange to hear.



RED CROSSBILLS.

$^3/_5$ Life-size.



m col. Chi. Acad. Sciences.

CALIFORNIA WOODPECKER.

THE CALIFORNIA WOOD-PECKER.

I may not be as pretty a bird as my red-headed cousin but I'm just as busy. My home is in the west among the pines on the mountains. I do not visit the east at all.

Of course I like insects and fruits just as my relations do, but I like best to eat acorns. You know, if I left the acorns on the trees and just got enough to eat at one time, after a while I would have a hard time finding any. They would drop off and roll away and get lost among the leaves and grasses. What would you do if you were I?

I have a very sharp bill, you see. So I can peck and peck at the tree until I have made a hole which will hold an acorn. Sometimes I fill my store house quite full in this way. You can see how they look in the picture. When I want to get at the meat in the acorn I drive the nut into a crack and split the shell. Then I have my breakfast easily enough.

Some of the other birds like acorns too—but I think they should find and store away their own and not try to take mine. I do not like to quarrel and so have many friends.

Then I have my nest to look after. I make it as my cousin does, by digging into a tree, first a passage way or hall—then a living-room. There are the four or five white eggs and there too soon are the little baby-birds to be taken care of. Now, have I not a great deal of work? Do you not think I am quite as busy as my cousin?

THE CALIFORNIA WOODPECKER.

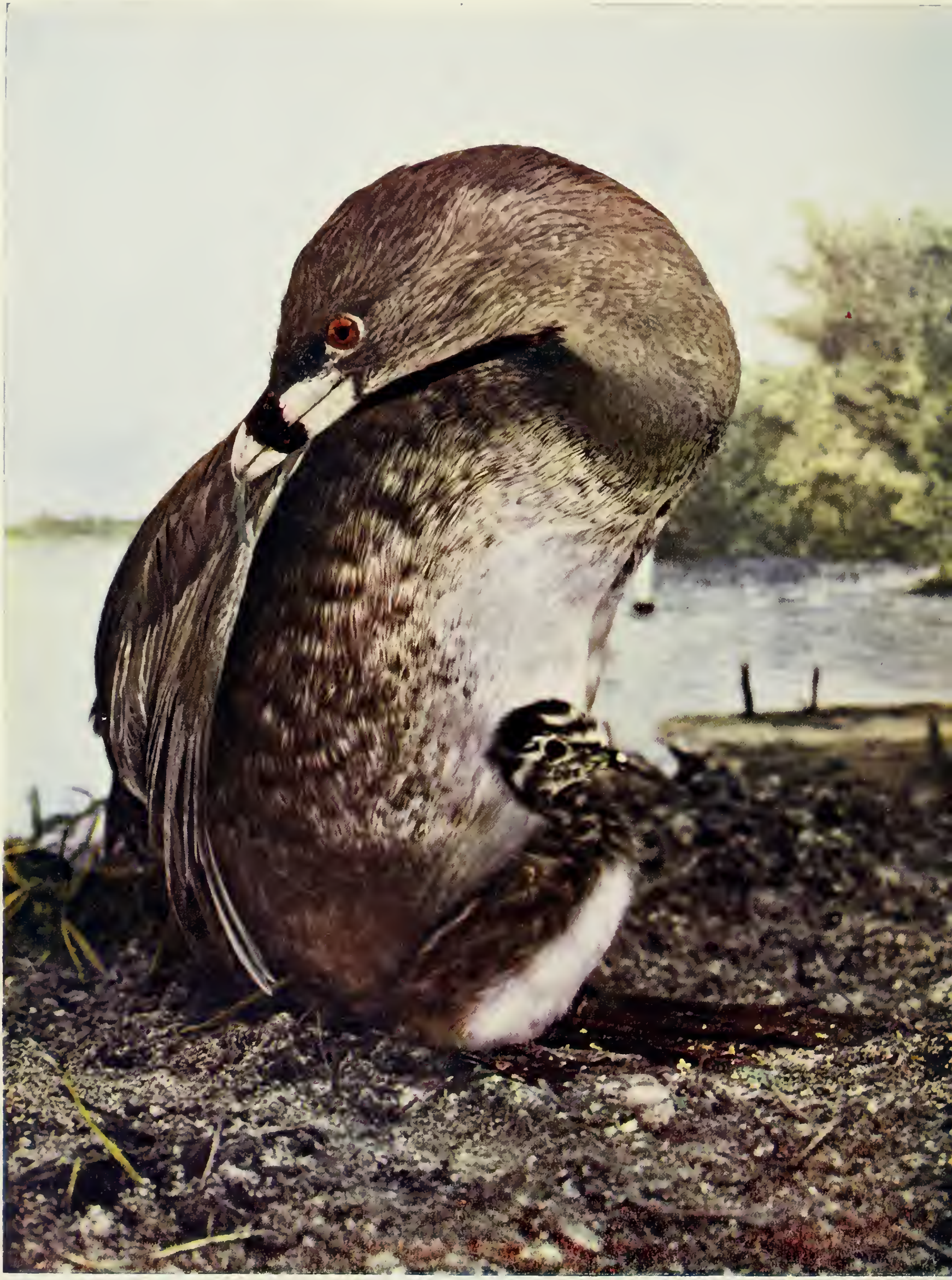
THIS fine specimen of the Woodpecker is by far the most sociable representative of the family in the United States, and it is no unusual occurence to see half a dozen or more in a single tree. It is also a well disposed bird, and seldom quarrels or fights with its own kind, or with smaller birds, but it attacks intruders on its winter stores with such vigor and presistence that they are compelled to vacate the premises in a hurry. Its manner of flight and call notes closely resemble those of the Red-Headed Woodpecker, and, like it, it loves to cling to some dead limb near the top of a tree and drum for hours at a time. It is one of the most restless of birds, and never appears to be at a loss for amusement, and no other bird belonging to this family could possibly be more industrious.

During the Spring and Summer its food consists, to some extent, of insects, including grass-hoppers, ants, beetles, and flies—varied with cherries, apples, figs, berries and green corn. Acorns form its principal food during the greater portion of the year. Of these it stores away large numbers in the thick bark of pines, in partly rotten limbs of oak trees, telegraph poles, and fence posts. A writer in the "Auk" says of its habits: "It is essentially a bird of the pines, only occasionally decending to the cotton woods of low valleys. The oaks, which are scattered through the lower pine zone, supply a large share of its food. Its habit of hoarding food is well known, and these stores are the source of unending quarrels with its numerous feathered enemies. I have laid its supplies under contribution myself, when short of provisions and lost from the command on which I had been traveling, by filling my saddlebags with half-dried acorns from under the loose bark of a dead pine."

The California Woodpecker is found in western Mexico, northern Lower California, and north through California into western Oregon. So far as is known the eastern limit of its range is the Santa Fe Mountains.

Its nest is usually from fifteen to twenty-five feet from the ground, excavated on the side of a branch of a good sized oak or sycamore. Breeding commences in April or May, according to locality. Both sexes assist in the excavation. The entrance hole is about one and three-fourths inches in diameter, perfectly circular, and is sometimes chisled through two or three inches of solid wood before the softer and decayed core is reached. The inner cavity is greatly enlarged as it descends, and varies from eight to twenty-four inches in depth. The eggs rarely exceed four or five, and are pure white in color.

The most remarkable fact concerning this species is the peculiar manner in which it stores acorns. The thick bark of large sugar and other pines has been seen completely riddled with small holes. A section of a partly decayed oak limb, three feet two inches long and five and one-half inches in diameter, contained 255 holes. Each hole is intended to hold a single acorn. The acorns fit quite accurately, are driven in point foremost, and are not readily extracted. Sweet acorns are selected. To get at their contents the acorns are carried to a convenient tree where a limb has been broken off, driven into a suitable crevice, split open, and the outer hull removed. Truly the California Woodpecker is no idler or bungler, nor is he a free-booter, like the noisy, roystering Jay. He makes an honest living, and provides for the evil day which comes alike to man and beast.



From col. F. M. Woodruff.

PIED BILLED GREBE.

THE PIEDBILL GREBE.

MEMBERS of the family of Grebes are to be found in the temperate zones of both hemispheres, beyond which they do not extend very far either to the north or south. They are usually found on ponds or large sheets of stagnant water, sometimes on deep, slow-moving streams; but always where sedges and rushes are abundant. Probably there are no birds better entitled to the name of water fowl than the Grebes—at least, observers state that they know of no others that do not on some occasions appear on dry land. It is only under the most urgent circumstances, as, for instance, when wounded, that they approach the shore, and even then they keep so close to the brink that on the slightest alarm they can at once plunge into the water. Whatever they do must be done in the water; they cannot even rise upon the wing without a preliminary rush over the surface of the lake. From dry land they cannot begin their flight. Their whole life is spent in swimming and diving. They even repose floating upon the water, and when thus asleep float as buoyantly as if they were made of cork, the legs raised to the edges of the wings, and the head comfortably buried among the feathers between the back and shoulder. Should a storm arise, they at once turn to face the blast, and are usually able, with their paddle-like feet, to maintain themselves in the same place. They dive with great facility, and make their way more swiftly when under water than when swimming at the top. When flying the long neck is stretched out straight forwards and the feet backwards. In the absence of any tail, they steer their course by means of their feet. When alarmed they instantly dive.

Their food consists of small fishes, insects, frogs, and tadpoles. Grebes are peculiar in their manner of breeding. They live in pairs, and are very affectionate, keeping in each others company during their migrations, and always returning together to the same pond. The nest is a floating one, a mass of wet weeds, in which the eggs are not only kept damp, but in the water. The weeds used in building the nests are procured by diving, and put together so as to resemble a floating heap of rubbish, and fastened to some old upright reeds. The eggs are from three to six, at first greenish white in color, but soon become dirty, and are then of a yellowish red or olive-brown tint, sometimes marbled.

The male and female both sit upon the nest, and the young are hatched in three weeks. From the first moment they are able to swim, and in a few days to dive. Having once quitted the nest they seldom return to it, a comfortable resting and sleeping place being afforded them on the backs of their parents. "It is a treat to watch the little family as now one, now another of the young brood, tired with the exertion of swimming or of struggling against the rippling water, mount as to a resting place on their mother's back; to see how gently, when they have recovered their strength, she returns them to the water; to hear the anxious, plaintive notes of the little warblers when they have ventured too far from the nest; to see their food laid before them by the old birds; or to witness the tenderness with which they are taught to dive."

THE PIEDBILL GREBE.

Boys and Girls:

This is the first time I've been on land for several weeks. I am sure you can't think of any other kind of bird who can say that.

Sometimes I don't go on land for months, but stay in the water all of the time—eat and sleep there, floating around.

My little chick wanted me to go on land so we could have our pictures taken.

If he were not sitting so close to me you could see better what paddles I have for feet.

I build my nest of weeds, grass, sticks, and anything I can find floating around. I most always fasten it to some reeds or tall grass that grow up out of the water.

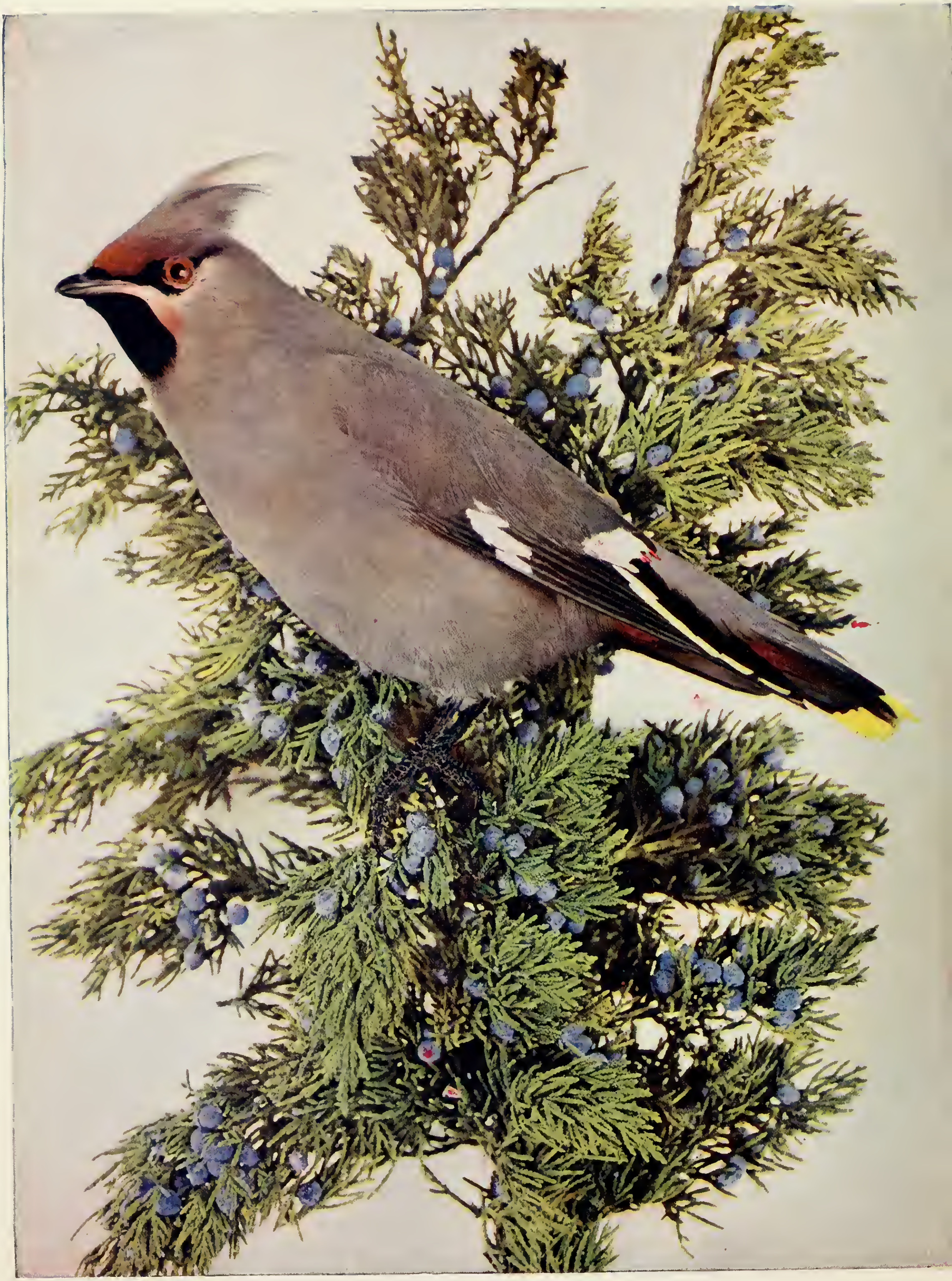
In this I lay the eggs and just as soon as the chicks come out of the shell they can swim. Of course they can't swim as well as I and they soon get tired. Do you know how I rest them?

Well, its very funny, but I just help them up on my back and there they rest while I swim around and get them food. When they get rested they slide off into the water.

Are you wondering if I can fly? Well, I can fly a little but not very well. I can get along very fast swimming, and as I do not go on land often, why should I care to fly.

Should any one try to harm me I can dive, and swim under water out of reach.

Well, chick, let us go back to our home in the water.



BOHEMIAN WAXWING.
Life-size.

THE BOHEMIAN WAX-WING.

THE Bohemian Wax-wing is interesting for its gipsy-like wanderings, one winter visiting one country, next season another, often in enormous flocks, and usually with intervals of many years, so that in former times their appearance was regarded as sure forebodings of war and pestilence, their arrival being dreaded as much as that of a comet. Another interesting feature of its history is the fact that for a long time this familiar bird eluded the search of the zoologist. Its breeding habits, and even the place where it breeds, were unknown thirty years ago, until finally discovered by Mr. Wolley in Lapland, after a diligent search during four summers. It is also called the European or Common Silk-tail, and is an inhabitant both of northern Europe and of North America, though in America the Cedar Bird is more often met with. In the northern portions of Europe, birch and pine forests constitute its favorite retreats, and these it seldom quits, except when driven by unusual severity of weather, or by heavy falls of snow, to seek refuge in more southern provinces. It is said that even in Russia, Poland, and southern Scandinavia it is constantly to be seen throughout the entire winter; that indeed, so rarely does it wander to more southern latitudes, that in Germany it is popularly supposed to make its appearance once in seven years. On the occasion of these rare migrations, the Silk-tails keep together in large flocks, and remain in any place that affords them suitable food until the supply is exhausted.

These birds are heavy and indolent, exerting themselves rarely except to satisfy hunger. They live in perfect harmony, and during their migrations indicate no fear of man, seeking their food in the streets of the villages and towns. They frequently settle in the trees, remaining almost motionless for hours together. Their flight is light and graceful, but on the ground they move with difficulty. Their call note is a hissing, twittering sound. In summer, insects are their chief food, while in winter they live principally on berries. The Wax-wing will devour in the course of twenty-four hours an amount of food equal to the weight of its own body. In Lapland is the favorite nesting ground of the Bohemian Wax-wing. The nests are deeply hidden among the boughs of pine trees, at no great height from the ground; their walls are formed of dry twigs and scraps from the surrounding branches, and the cavities are wide, deep, and lined with blades of grass and feathers. There are five eggs, laid about the middle of June; the shell is bluish or purplish white, sprinkled with brown, black, or violet spots and streaks, some of which take the form of a wreath at the broad end. The exquisite daintiness and softness of the Wax-wing's coat can be compared only to floss silk.

THE MARSH WREN.

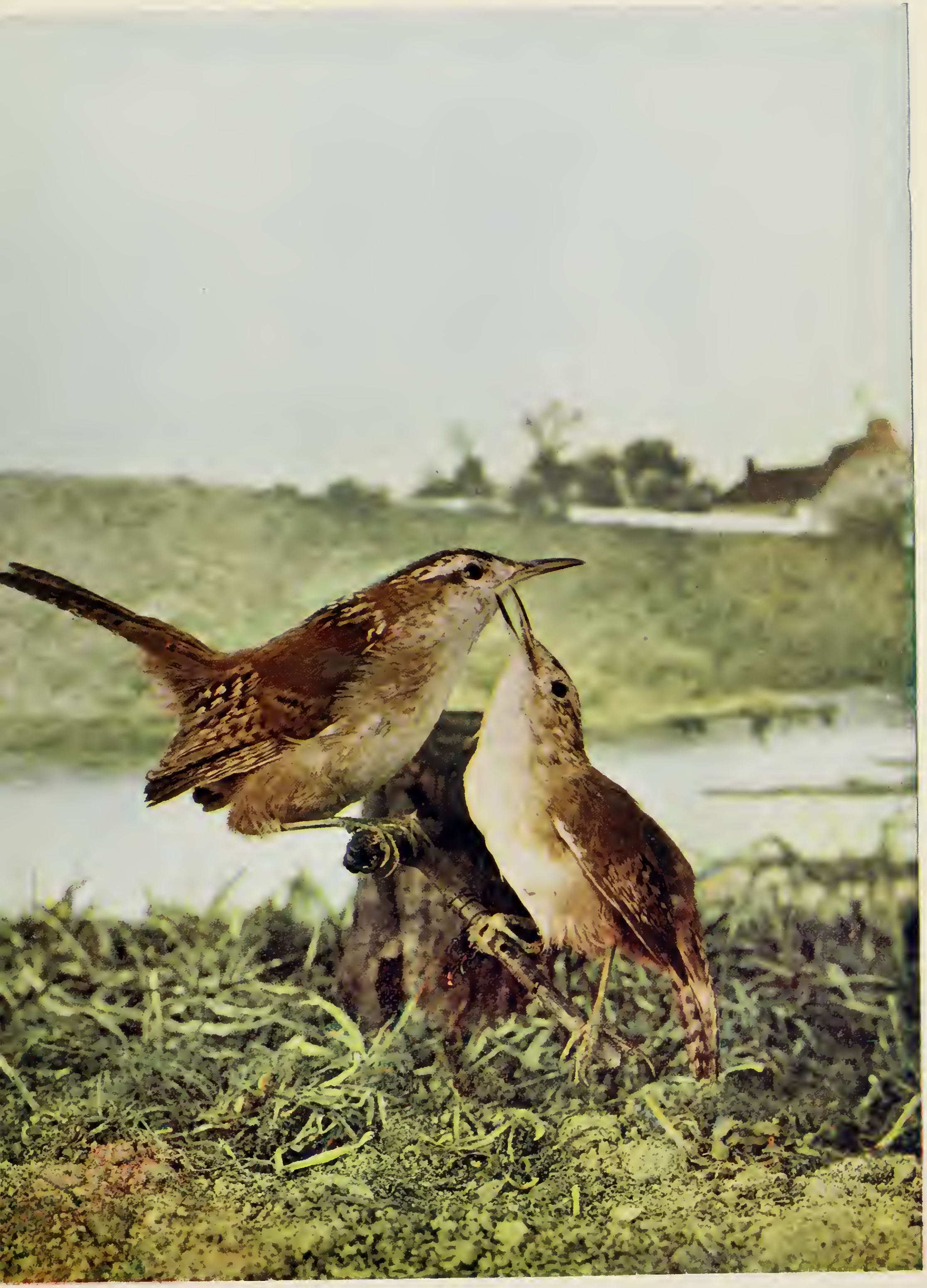
With tail up, and head up,
The Wren begins to sing;
He fills the air with melody,
And makes the alders ring;
We listen to his cadences,
We watch his frisky motions,
We think—his mate attending him—
He's got some nesting notions.—C. C. M.

THESE Wrens inhabit marshy and weedy bottom lands along river courses, and have all the brisk manners and habits of the family. This species, however, has a peculiar habit of building several nests every season, and it is suggested that these are built to procure protection for the female, in order that when search is made for the nest where she is sitting, the male may lure the hunter to an empty nest.

Its song is not unlike that of the House Wren, though less agreeable. It is a summer resident, arriving in May and departing in September. Its nest, which is found along borders of rivers, is made of sedge and grasses suspended near tall reeds. It has been found hanging over a small stream, suspended from the drooping bough of an alder tree, swayed to and fro by every breath of air. A careful observer states that a Wren will forsake her nest when building it, sooner than any other bird known to him. Disturb her repeatedly when building and she leaves it apparently without cause; insert your fingers in her tenement and she will leave it forever. But when the eggs are laid, the Wren will seldom abandon her treasure, and when her tender brood are depending on her for food, she will never forsake them, even though the young be handled, or the female bird be caught on the nest while feeding them. The food of the Wren is insects, their larvae and eggs, and fruit in season.

This Wren has justly been called a perennial songster. "In Spring the love-song of the Wren sounds through the forest glades and hedges, as the buds are expanding into foliage and his mate is seeking a site for a cave-like home. And what a series of jerks it is composed of, and how abruptly he finishes his song, as if suddenly alarmed; but this is his peculiar habit and common to him alone. In summer we hear his song morning, noon, and night, go forth for very joyfulness, as he wanders hither and thither in his leafy bower." It is only in the moulting season that he does not sing.

A lady who used to attract a great number of birds to her garden with crumbs, seeds, and other dainties, said that when the weather became cold the Wrens used to gather upon a large branch of a tree, about four inches beneath another branch. They assembled there in the evening and packed themselves very comfortably for the night, three or four deep, apparently for the sake of warmth, the topmost Wren always having his back pressed against the outer branch as if to keep all steady. Pitying their forlorn condition, she provided a bed-room for them—a square box lined with flannel, and with a very small round hole for a door. This was fastened to the branch, and the birds promptly took possession of it, their numbers increasing nightly, until at least forty Wrens crowded into the box which did not seem to afford room for half the number. When thus assembled they became so drowsy as to permit themselves to be gently handled.



LONG-BILLED MARSH WRENS.
Life-size.

THE MARSH WRENS.

A happier pair of birds than these little Wrens it would be hard to find.

They have just come up from taking their morning bath and are going to sing a while before going to work on their nests.

You see I say nests. That is a strange thing about the Wrens, they build several nests. I wonder if you can tell why they do this. If you can't, ask your teacher about it.

It is a little too early in the season or I would have one of the nests in the picture for you to look at.

I will try to describe it to you, so that you will know it when you see it. These little Wrens make their nests of coarse grasses, reed stalks, and such things, lined with fine grasses. It is round like a ball, or nearly so, and has the opening in the side. They fasten them to the reeds and bushes.

If you wish to get acquainted with these birds, you must visit the tall grasses and cat-tails along rivers and creeks and in marshes.

You won't have to let them know that you are coming; they will see you long before you see them, and from their little nests they will begin to scold you, for fear that you mean to do them harm.

When they see that you mean them no harm, they will begin to entertain you with their songs. Oh, how they do sing! It just seems as though they would burst with song.

You can see how happy the one is in the picture. The other little fellow will soon take his turn. See how straight he holds his tail up. Find out all you can about these Wrens. You notice they have long bills. We call them Long-billed Marsh Wrens. There are several other kinds. You surely must have seen their cousins, the House Wrens. I will show you their pictures some day.

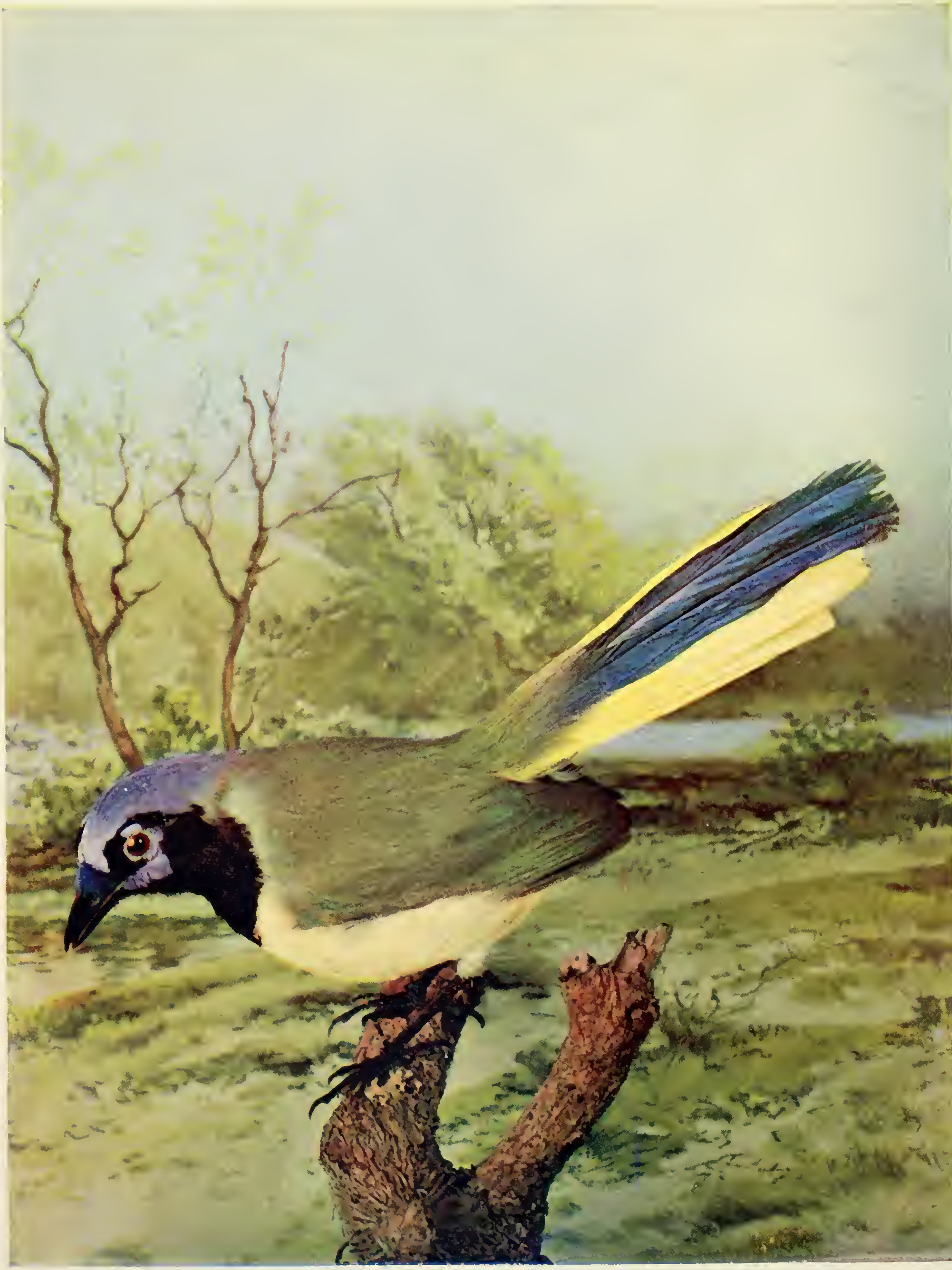
THE ARIZONA GREEN JAY.

THE geographical range of the Arizona Jay is in southern New Mexico and Arizona and south into Sonora and Chihuahua, Mexico. It is a common resident throughout the oak belt which generally fringes the foot-hills of the mountains and ranges well up among the pines. In suitable localities it is very abundant. It is rarely seen at any distance out of the arid plains; but after the breeding season is over, small flocks are sometimes met with among the shrubbery of the few water courses, several miles away from their regular habitat. They are seen in the early Spring, evidently on a raid for eggs and the young of smaller birds. On such occasions they are very silent, and their presence is only betrayed by the scoldings they receive from other birds. On their own heath they are as noisy as any of our Jays, and apparently far more sociable, a number of pairs frequently nesting close to each other in a small oak grove. They move about in small family parties of from half a dozen to twenty or thirty, being rarely seen alone. They are restless, constantly on the move, prying into this or that, spending a good portion of their time on the ground, now hopping on a low limb, and the next minute down again, twitching their tails almost constantly. Their call notes are harsh and far reaching, and are somewhat similar to those of the California Jay.

The voices of animals have a family character not easily mistaken, and this similarity is especially observable in birds. As Agassiz says, "Compare all the sweet warbles of the songster family—the nightingales, the thrushes, the mocking birds, the robins; they differ in the greater or lesser perfection of their note, but the same kind of voice runs through the whole group. Does not every member of the Crow family caw, whether it be a Jackdaw, the Jay, or the Magpie, the Rook in some green rookery of the Old World, or the Crow of our woods, with its long melancholy caw that seems to make the silence and solitude deeper?"

The habits of the Arizona Jay are similar to those of its brethren. Its food consists of grasshoppers, insects, animal matter, wild fruits, seeds, and especially acorns. It flies by partly closing its wings, darting suddenly down, then up again, and repeating these movements for some time. It mates about the end of February. The nest, composed of dry rootlets laid very closely in rings, is usually found in an oak sapling about ten feet from the ground. The inside diameter is five inches, and depth one and three-fourths inches. It is like a deep saucer.

The Arizona Jay is considered a foothill bird, not going far into the pines and not appearing on the plains. But one brood appears to be raised in a season, and nesting lasts about sixteen days. The eggs vary from four to seven, and differ from all the known eggs of this family found within the United States, being unspotted. They are glaucous green in color, and the majority are much more glossy than Jays' eggs generally are. In one hundred and thirty-six specimens examined, all were perfectly immaculate.



ARIZONA JAY.
$^{3}/_{5}$ Life-size

CHICAGO COLORTYPE CO.

BIRDS.

ILLUSTRATED BY COLOR PHOTOGRAPHY.

Vol. I. MAY, 1897. No. 5.

NESTING TIME.

> "There swims no goose so gray, but soon or late,
> She takes some honest gander for a mate;"
> There live no birds, however bright or plain,
> But rear a brood to take their place again.
> —C. C. M.

QUITE the jolliest season of the year, with the birds, is when they begin to require a home, either as a shelter from the weather, a defence against their enemies, or a place to rear and protect their young. May is not the only month in which they build their nests, some of our favorites, indeed, waiting till June, and even July; but as it is the time of the year when a general awakening to life and activity is felt in all nature, and the early migrants have come back, not to re-visit, but to re-establish their temporarily deserted homes, we naturally fix upon the first real spring month as the one in which their little hearts are filled with titillations of joy and anticipation.

In May, when the trees have put on their fullest dress of green, and the little nests are hidden from all curious eyes, if we could look quite through the waving branches and rustling leaves, we should behold the little mothers sitting upon their tiny eggs in patient happiness, or feeding their young broods, not yet able to flutter away; while in the leafy month of June, when Nature is perfect in mature beauty, the young may everywhere be seen gracefully imitating the parent birds, whose sole purpose in life seems to be the fulfillment of the admonition to care well for one's own.

There can hardly be a higher pleasure than to watch the nest building of birds. See the Wren looking for a convenient cavity in ivy-covered walls, under eaves, or among the thickly growing branches of fir trees, the tiny creature singing with cheerful voice all day long. Observe the Woodpecker tunneling his nest in the limb of a lofty tree, his pickax-like beak finding no difficulty in making its way through the decayed wood, the sound of his pounding, however, accompanied by his shrill whistle, echoing through the grove.

But the nest of the Jay: Who can find it? Although a constant prowler about the nests of other birds, he is so wary and secretive that his little home is usually found only by accident. And the Swallow: "He is the bird of return," Michelet prettily says of him. If you will only treat him kindly, says Ruskin, year after year, he comes back to the same niche, and to the same hearth, for his nest. To the same niche! Think of this a little, as if you heard of it for the first time.

But nesting-time with the birds is one of sentiment as well as of industry. The amount of affectation in love-making they are capable of is simply ludicrous. The British Sparrow which, like the poor, we have with us always, is a much more interesting bird in this and other respects than we commonly give him credit for. It is because we see him every day, at the back door, under the eaves, in the street, in the parks, that we are indifferent to him. Were he of brighter plumage, brilliant as the Bobolink or the Oriole, he would be a welcome, though a perpetual, guest, and we would not, perhaps, seek legislative action for his extermination. If he did not drive away Bluebirds, whose nesting-time and nesting-place are quite the same as his own, we might not discourage his nesting proclivity, although we cannot help recognizing his cheerful chirp with generous crumbs when the snow has covered all the earth and left him desolate.

C. C. MARBLE.

NATIONAL COUNCIL OF WOMEN.

EXTRACT FROM THE REPORT OF THE COMMITTEE ON DRESS, BY ITS CHAIRMAN, MRS. FRANK JOHNSON.

BIRDS, WINGS AND FEATHERS EMPLOYED AS GARNITURE.

From the school-room there should certainly emanate a sentiment which would discourage forever the slaughter of birds for ornament.

The use of birds and their plumage is as inartistic as it is cruel and barbarous.

THE HALO.

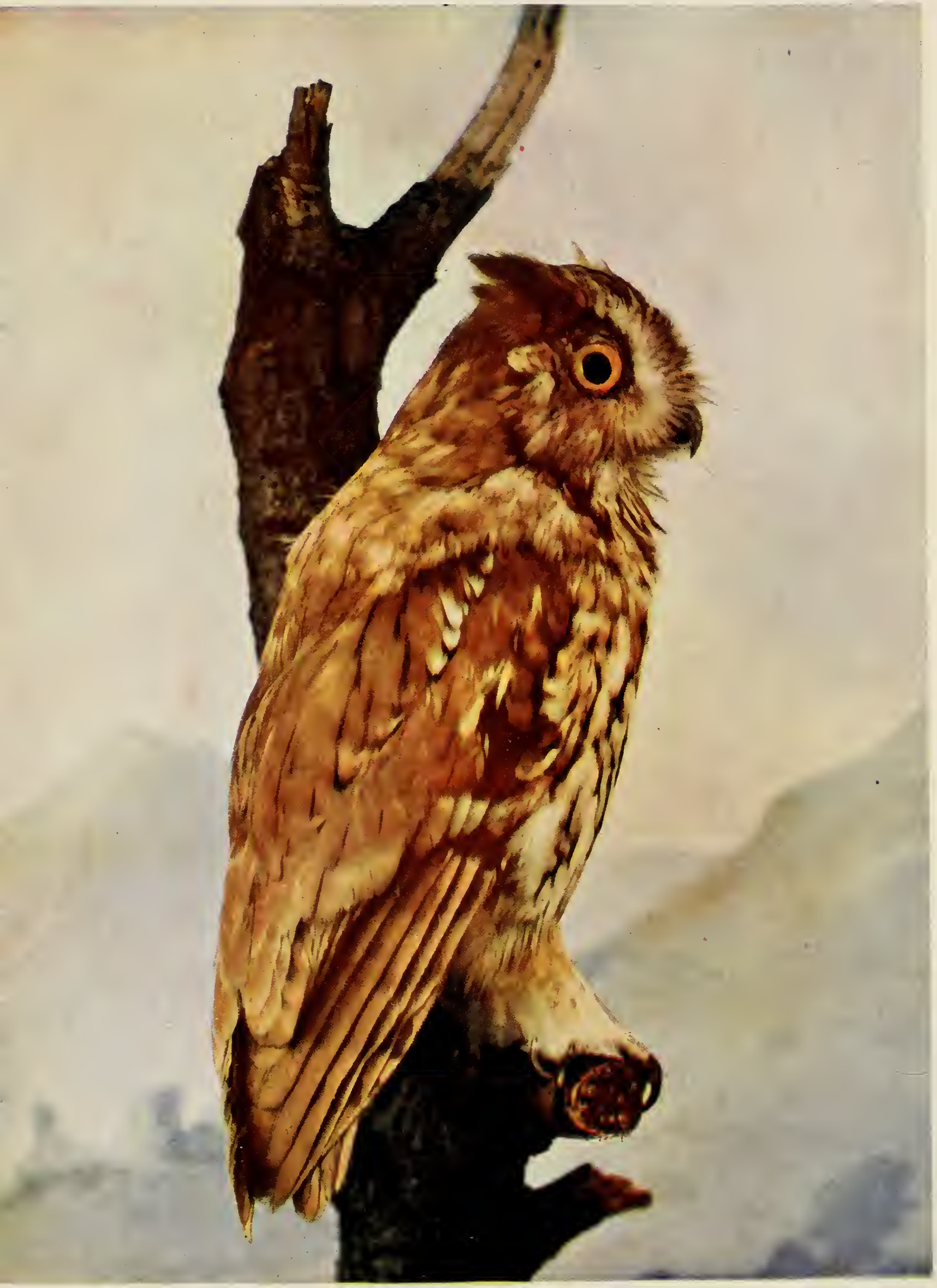
"One London dealer in birds received, when the fashion was at its height, a single consignment of thirty-two thousand dead humming birds, and another received at one time, thirty thousand aquatic birds and three hundred thousand pairs of wings."

Think what a price to pay,
Faces so bright and gay,
Just for a hat!
Flowers unvisited, mornings unsung,
Sea-ranges bare of the wings that o'erswung—
Bared just for that!

Think of the others, too,
Others and *mothers*, too,
Bright-Eyes in hat!
Hear you no mother-groan floating in air,
Hear you no little moan—birdling's despair—
Somewhere for that?

Caught 'mid some mother-work,
Torn by a hunter Turk,
Just for your hat!
Plenty of mother-heart yet in the world:
All the more wings to tear, carefully twirled!
Women want that?

Oh, but the shame of it,
Oh, but the blame of it,
Price of a hat!
Just for a jauntiness brightening the street!
This is your halo—O faces so sweet—
Death, and for that!—W. C. GANNETT



col. Chi. Acad. Sciences.

SCREECH OWL.

THE SCREECH OWL.

I wouldn't let them put my picture last in the book as they did my cousin's picture in March "BIRDS." I told them I would screech if they did.

You don't see me as often as you do the Blue-bird, Robin, Thrush and most other birds, but it is because you don't look for me. Like all other owls I keep quiet during the day, but when night comes on, then my day begins. I would just as soon do as the other birds—be busy during the day and sleep during the night—but really I can't. The sun is too bright for my eyes and at night I can see very well. You must have your folks tell you why this is.

I like to make my nest in a hollow orchard tree, or in a thick evergreen. Sometimes I make it in a hay loft. Boys and girls who live in the country know what a hay loft is.

People who know me like to have me around, for I catch a good many mice, and rats that kill small chickens. All night long I fly about so quietly that you could not hear me. I search woods, fields, meadows, orchards, and even around houses and barns to get food for my baby owls and their mamma. Baby owls are queer children. They never get enough to eat, it seems. They are quiet all day, but just as soon as the sun sets and twilight gathers, you should see what a wide awake family a nest full of hungry little screech owls can be.

Did you ever hear your mamma say when she couldn't get baby to sleeep at night, that he is like a little owl? You know now what she means. I think I hear my little folks calling for me so I'll be off. Good night to you, and good morning for me.

THE ORCHARD ORIOLE.

> The Orchard Oriole is here.
> Why has he come? To cheer, to cheer —C. C. M.

THE Orchard Oriole has a general range throughout the United States, spending the winter in Central America. It breeds only in the eastern and central parts of the United States. In Florida it is a summer resident, and is found in greatest abundance in the states bordering the Mississippi Valley. This Oriole appears on our southern border about the first of April, moving leisurely northward to its breeding grounds for a month or six weeks, according to the season, the males preceding the females several days.

Though a fine bird, and attractive in his manners and attire, he is not so interesting or brilliant as his cousin, the Baltimore Oriole. He is restless and impulsive, but of a pleasant disposition, on good terms with his neighbors, and somewhat shy and difficult to observe closely, as he conceals himself in the densest foliage while at rest, or flies quickly about from twig to twig in search of insects, which, during the summer months, are his exclusive diet.

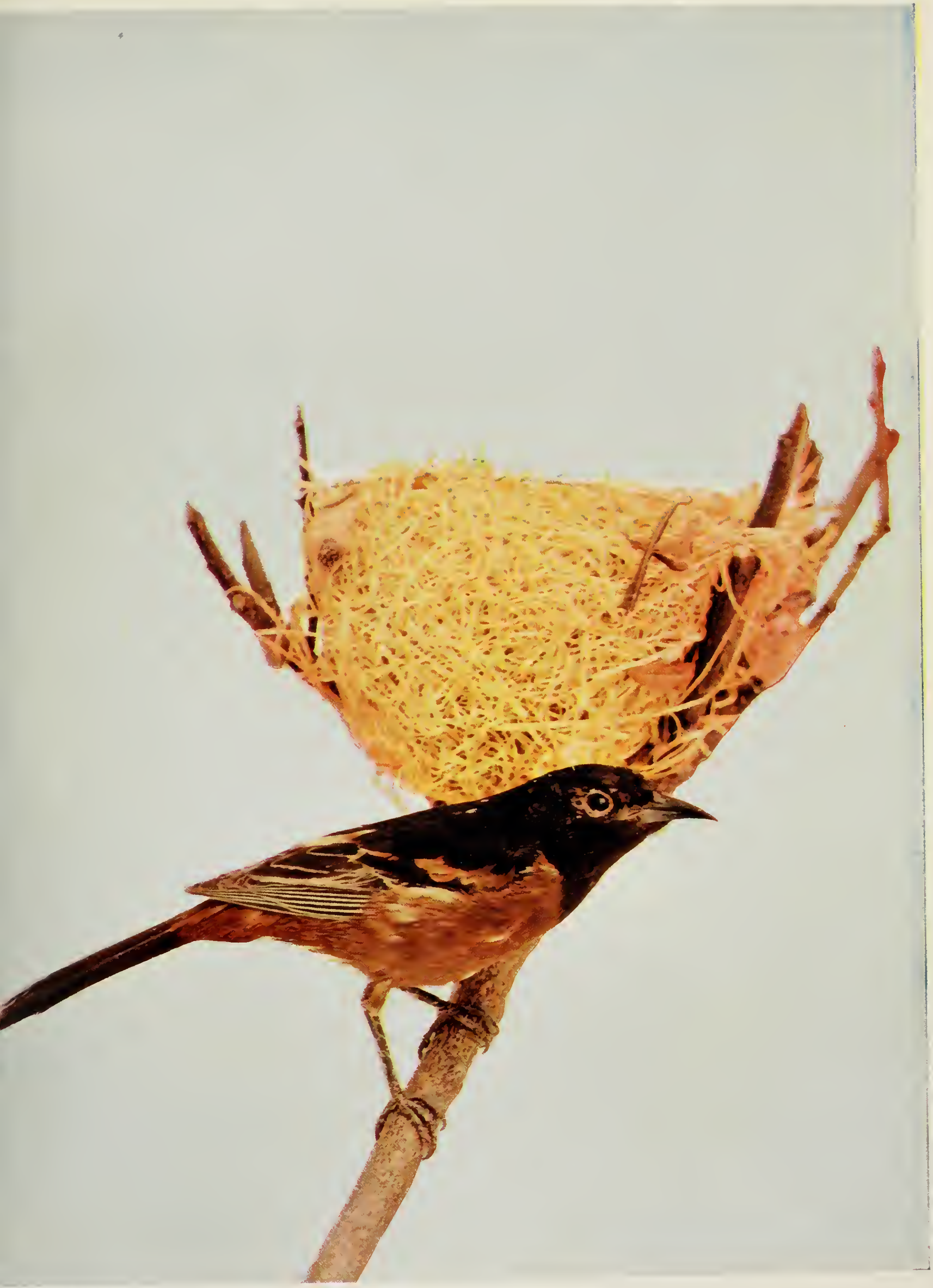
The favorite haunts of this very agreeable songster, as his name implies, are orchards, and when the apple and pear trees are in bloom, and the trees begin to put out their leaves, his notes have an ecstatic character quite the reverse of the mournful lament of the Baltimore species. Some writers speak of his song as confused, but others say this attribute does not apply to his tones, the musician detecting anything but confusion in the rapidity and distinctness of his gushing notes. These may be too quick for the listener to follow, but there is harmony in them.

In the Central States hardly an orchard or a garden of any size can be found without these birds. They prefer to build their nests in apple trees. The nest is different, but quite as curiously made as that of the Baltimore. It is suspended from a small twig, often at the very extremity of the branches. The outer part of the nest is usually formed of long, tough grass, woven through with as much neatness and in as intricate a manner as if sewed with a needle. The nests are round, open at the top, about four inches broad and three deep.

It is admitted that few birds do more good and less harm than our Orchard Oriole, especially to the fruit grower. Most of his food consists of small beetles, plant lice, flies, hairless caterpillars, cabbage worms, grasshoppers, rose bugs, and larvæ of all kinds, while the few berries it may help itself to during the short time they last are many times paid for by the great number of insect pests destroyed, making it worthy the fullest protection.

The Orchard Oriole is very social, especially with the king bird. Most of his time is spent in trees. His flight is easy, swift, and graceful. The female lays from four to six eggs, one each day. She alone sits on the eggs, the male feeding her at intervals. Both parents are devoted to their young.

The fall migration begins in the latter part of July or the beginning of August, comparatively few remaining till September.



m col. F. M. Woodruff.

ORCHARD ORIOLE.

THE MOTTLED OR “SCREECH” OWL.

“NIGHT WANDERER,” as this species of Owl has been appropriately called, appears to be peculiar to America. They are quite scarce in the south, but above the Falls of the Ohio they increase in number, and are numerous in Virginia, Maryland, and all the eastern districts. Its flight, like that of all the owl family, is smooth and noiseless. He may be sometimes seen above the topmost branches of the highest trees in pursuit of large beetles, and at other times he sails low and swiftly over the fields or through the woods, in search of small birds, field mice, moles, or wood rats, on which he chiefly subsists.

The Screech Owl's nest is built in the bottom of a hollow trunk of a tree, from six to forty feet from the ground. A few grasses and feathers are put together and four or five eggs are laid, of nearly globular form and pure white color. This species is a native of the northern regions, arriving here about the beginning of cold weather and frequenting the uplands and mountain districts in preference to the lower parts of the country.

In the daytime the Screech Owl sits with his eyelids half closed, or slowly and alternately opening and shutting, as if suffering from the glare of day; but no sooner is the sun set than his whole appearance changes; he becomes lively and animated, his full and globular eyes shine like those of a cat, and he often lowers his head like a cock when preparing to fight, moving it from side to side, and also vertically, as if watching you sharply. In flying, it shifts from place to place “with the silence of a spirit,” the plumage of its wings being so extremely fine and soft as to occasion little or no vibration of the air.

The Owl swallows its food hastily, in large mouthfuls. When the retreat of a Screech Owl, generally a hollow tree or an evergreen in a retired situation, is discovered by the Blue Jay and some other birds, an alarm is instantly raised, and the feathered neighbors soon collect and by insults and noisy demonstration compel his owlship to seek a lodging elsewhere. It is surmised that this may account for the circumstance of sometimes finding them abroad during the day on fences and other exposed places.

Both red and gray young are often found in the same nest, while the parents may be both red or both gray, the male red and the female gray, or vice versa.

The vast numbers of mice, beetles, and vermin which they destroy render the owl a public benefactor, much as he has been spoken against for gratifying his appetite for small birds. It would be as reasonable to criticise men for indulging in the finer foods provided for us by the Creator. They have been everywhere hunted down without mercy or justice.

During the night the Screech Owl utters a very peculiar wailing cry, not unlike the whining of a puppy, intermingled with gutteral notes. The doleful sounds are in great contrast with the lively and excited air of the bird as he utters them. The hooting sound, so fruitful of “shudders” in childhood, haunts the memory of many an adult whose earlier years, like those of the writer, were passed amidst rural scenery.

THE MARSH HAWK.

ONE of the most widely distributed birds of North America is the Marsh Hawk, according to Wilson, breeding from the fur regions around Hudson's Bay to Texas, and from Nova Scotia to Oregon and California. Excepting in the Southern portion of the United States, it is abundant everywhere. It makes its appearance in the fur countries about the opening of the rivers, and leaves about the beginning of November. Small birds, mice, fish, worms, and even snakes, constitute its food, without much discrimination. It is very expert in catching small green lizards, animals that can easily evade the quickest vision.

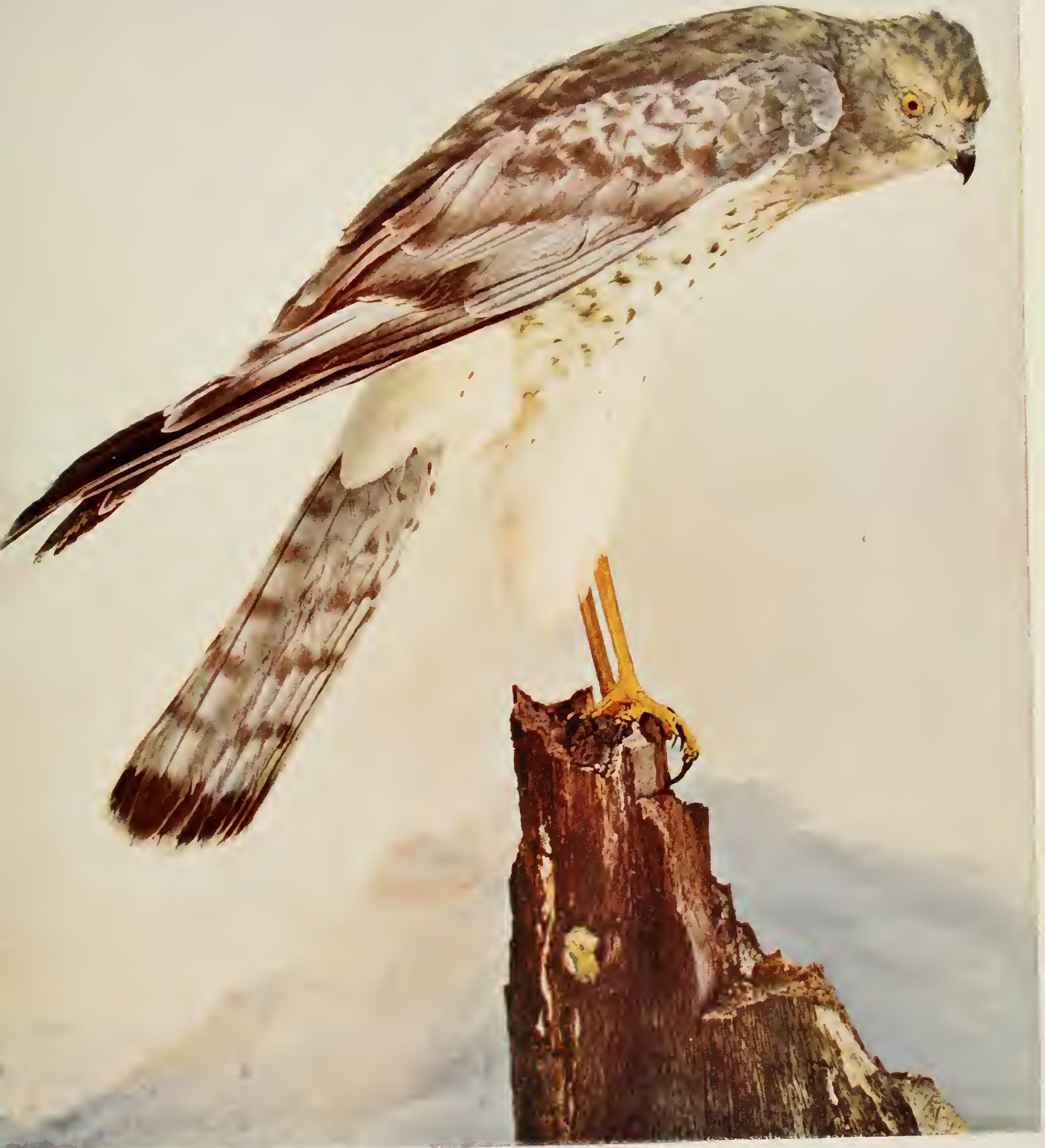
It is very slow on the wing, flies very low, and in a manner different from all others of the hawk family. Flying near the surface of the water, just above the weeds and canes, the Marsh Hawk rounds its untiring circles hour after hour, darting after small birds as they rise from cover. Their never ending flight, graceful as it is, becomes monotonous to the watcher. Pressed by hunger, they attack even wild ducks.

In New Jersey, Pennsylvania, and Delaware, where it sweeps over the low lands, sailing near the earth, in search of a kind of mouse very common in such situations, it is chiefly known as the Mouse Hawk. In the southern rice fields it is useful in preventing to some extent the ravages of the swarms of Bobolinks. It has been stated that one Marsh Hawk was considered by planters equal to several negroes for alarming the rice birds. This Hawk when feeding is readily approached.

The birds nest in low lands near the sea shore, in the barrens, and on the clear table-lands of the Alleghanies, and once a nest was found in a high covered pine barrens of Florida.

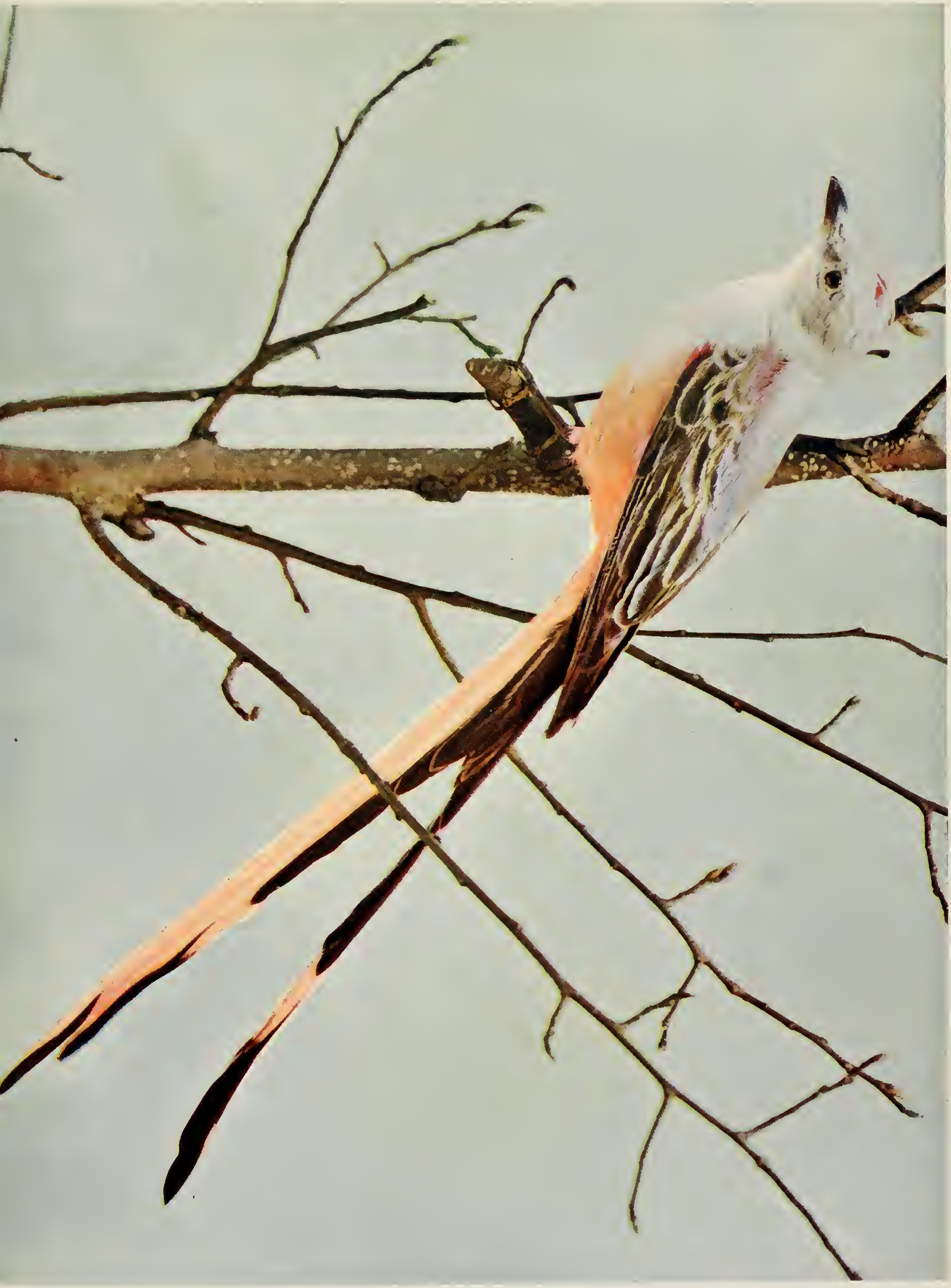
The Marsh Hawks always keep together after pairing, working jointly in building the nest, in sitting upon the eggs, and in feeding the young. The nest is clumsily made of hay, occasionally lined with feathers, pine needles, and small twigs. It is built on the ground, and contains from three to five eggs of a bluish white color, usually more or less marked with purplish brown blotches. Early May is their breeding time.

It will be observed that even the Hawk, rapacious as he undoubtedly is, is a useful bird. Sent for the purpose of keeping the small birds in bounds, he performs his task well, though it may seem to man harsh and tyranical. The Marsh Hawk is an ornament to our rural scenery, and a pleasing sight as he darts silently past in the shadows of falling night.



om col. Chi. Acad Sciences.

MARSH HAWK.



THE SCISSOR-TAILED FLYCATCHER.

FLYCATCHERS are all interesting, and many of them are beautiful, but the Scissor-tailed species of Texas is especially attractive. They are also known as the Swallow-tailed Flycatcher, and more frequently as the "Texan Bird of Paradise." It is a common summer resident throughout the greater portion of that state and the Indian Territory, and its breeding range extends northward into Southern Kansas. Occasionally it is found in southwestern Missouri, western Arkansas, and Illinois. It is accidental in the New England states, the Northwest Territory, and Canada. It arrives about the middle of March and returns to its winter home in Central America in October. Some of the birds remain in the vicinity of Galveston throughout the year, moving about in small flocks.

There is no denying that the gracefulness of the Scissor-tailed Flycatcher should well entitle him to the admiration of bird-lovers, and he is certain to be noticed wherever he goes. The long outer tail feathers he can open and close at will. His appearance is most pleasing to the eye when fluttering slowly from tree to tree on the rather open prairie, uttering his twittering notes, "Spee-spee." When chasing each other in play or anger these birds have a harsh note like "Thish-thish," not altogether agreeable. Extensive timber land is shunned by this Flycatcher, as it prefers more open country, though it is often seen in the edges of woods. It is not often seen on the ground, where its movements are rather awkward. Its amiability and social disposition are observed in the fact that several pairs will breed close to each other in perfect harmony. Birds smaller than itself are rarely molested by it, but it boldly attacks birds of prey. It is a restless bird, constantly on the lookout for passing insects, nearly all of which are caught on the wing and carried to a perch to be eaten. It eats moths, butterflies, beetles, grasshoppers, locusts, cotton worms, and, to some extent, berries. Its usefulness cannot be doubted. According to Major Bendire, these charming creatures seem to be steadily increasing in numbers, being far more common in many parts of Texas, where they are a matter of pride with the people, than they were twenty years ago.

The Scissor-tails begin housekeeping some time after their arrival from Central America, courting and love making occupying much time before the nest is built. They are not hard to please in the selection of a suitable nesting place, almost any tree standing alone being selected rather than a secluded situation. The nest is bulky, commonly resting on an exposed limb, and is made of any material that may be at hand. They nest in oaks, mesquite, honey locust, mulberry, pecan, and magnolia trees, as well as in small thorny shrubs, from five to forty feet from the ground. Rarely molested they become quite tame. Two broods are often raised. The eggs are usually five. They are hatched by the female in twelve days, while the male protects the nest from suspicious intruders. The young are fed entirely on insects and are able to leave the nest in two weeks. The eggs are clear white, with markings of brown, purple, and lavender spots and blotches.

CHICKADEE.

Bird of the Merry Heart.

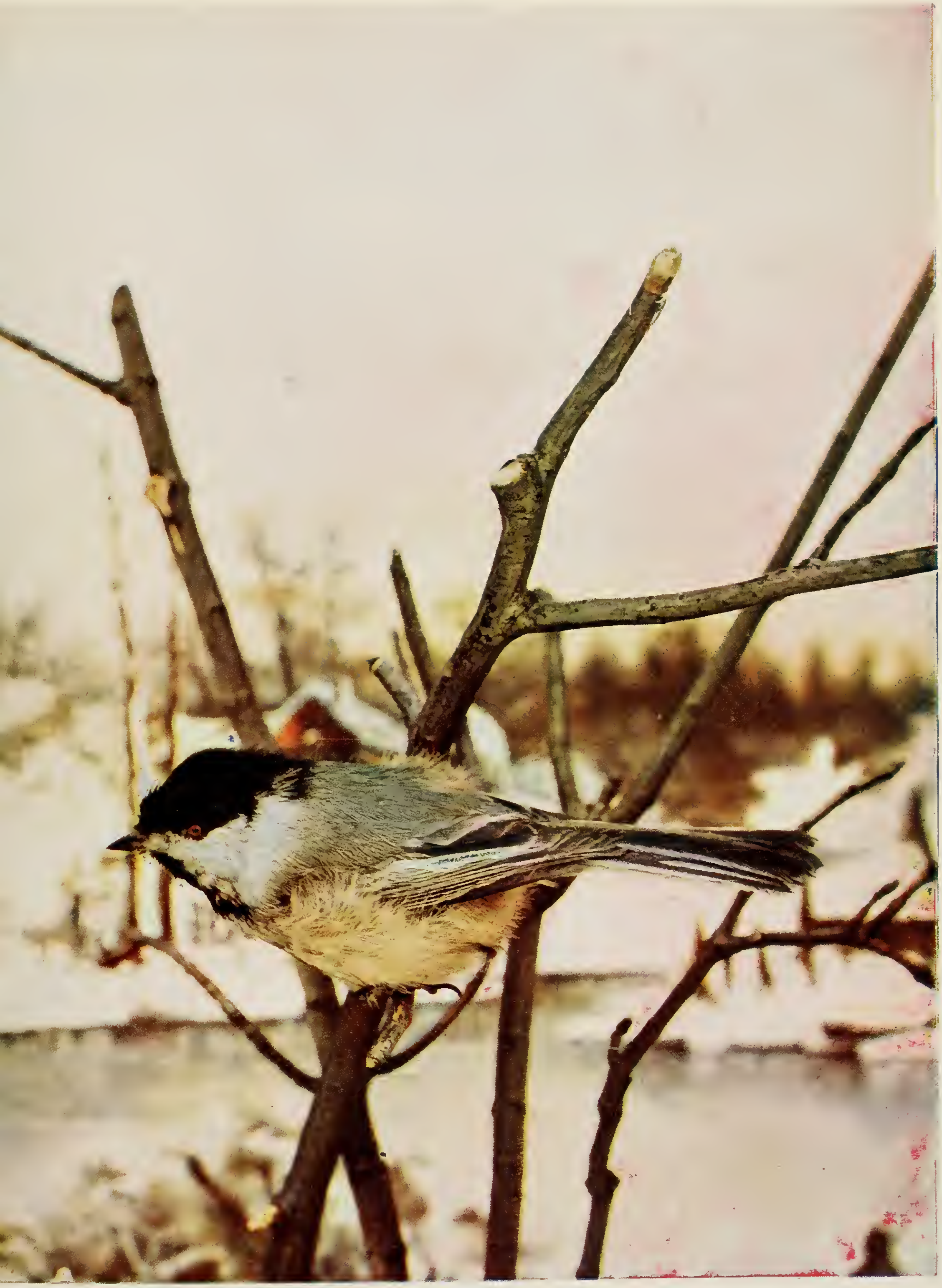
Here is a picture of a bird that is always merry. He is a bold, saucy little fellow, too, but we all love him for it. Don't you think he looks some like the Canada Jay that you saw in April "BIRDS?"

I think most of you must have seen him, for he stays with us all the year, summer and winter. If you ever heard him, you surely noticed how plainly he tells you his name. Listen—"Chick-a-dee-dee; Chick-a-dee; Hear, hear me"—That's what he says as he hops about from twig to twig in search of insects' eggs and other bits for food. No matter how bitter the wind or how deep the snow, he is always around—the same jolly, careless little fellow, chirping and twittering his notes of good cheer.

Like the Yellow Warblers on page 169, Chickadees like best to make their home in an old stump or hole in a tree—not very high from the ground. Sometimes they dig for themselves a new hole, but this is only when they cannot find one that suits them.

The Chickadee is also called Black-capped Titmouse. If you look at his picture you will see his black cap. You'll have to ask someone why he is called Titmouse. I think Chickadee is the prettier name, don't you?

If you want to get well acquainted with this saucy little bird, you want to watch for him next winter, when most of the birds have gone south. Throw him crumbs of bread and he will soon be so tame as to come right up to the door step.



om col. Chi. Acad. Sciences.

CHICKADEE.

THE BLACK-CAPPED CHICKADEE.

"Chic-chickadee dee!" I saucily say;
My heart it is sound, my throat it is gay!
Every one that I meet I merrily greet
With a chickadee dee, chickadee dee!
To cheer and to cherish, on roadside and street,
My cap was made jaunty, my note was made sweet.

Chickadeedee, Chickadeedee!
No bird of the winter so merry and free;
Yet sad is my heart, though my song one of glee,
For my mate ne'er shall hear my chickadeedee.

I "chickadeedee" in forest and glade,
"Day, day, day!" to the sweet country maid;
From autumn to spring time I utter my song
Of chickadeedee all the day long!
The silence of winter my note breaks in twain,
And I "chickadeedee" in sunshine and rain.

Chickadeedee Chickadeedee!
No bird of the winter so merry and free;
Yet sad is my heart, though my song one of glee,
For my mate ne'er shall hear my chickadeedee.--C. C. M.

A SAUCY little bird, so active and familiar, the Black-Capped Chickadee, is also recognized as the Black Capped Titmouse, Eastern Chickadee, and Northern Chickadee. He is found in the southern half of the eastern United States, north to or beyond forty degrees, west to eastern Texas and Indian Territory.

The favorite resorts of the Chickadee are timbered districts, especially in the bottom lands, and where there are red bud trees, in the soft wood of which it excavates with ease a hollow for its nest. It is often wise enough, however, to select a cavity already made, as the deserted hole of the Downy Woodpecker, a knot hole, or a hollow fence rail. In the winter season it is very familiar, and is seen about door yards and orchards, even in towns, gleaning its food from the kitchen remnants, where the table cloth is shaken, and wherever it may chance to find a kindly hospitality.

In an article on "Birds as Protectors of Orchards," Mr. E. H. Forbush says of the Chickadee: "There is no bird that compares with it in destroying the female canker-worm moths and their eggs." He calculated that one Chickadee in one day would destroy 5,550 eggs, and in the twenty-five days in which the canker-worm moths run or crawl up the trees 138,750 eggs. Mr. Forbush attracted Chickadees to one orchard by feeding them in winter, and he says that in the following summer it was noticed that while trees in neighboring orchards were seriously damaged by canker-worms, and to a less degree by tent caterpillars, those in the orchard which had been frequented by the Chickadee during the winter and spring were not seriously infested, and that comparatively few of the worms and caterpillars were to be found there. His conclusion is that birds that eat eggs of insects are of the greatest value to the farmer, as they feed almost entirely on injurious insects and their eggs, and are present all winter, where other birds are absent.

The tiny nest of the Chickadee is made of all sorts of soft materials, such as wool, fur, feathers, and hair placed in holes in stumps of trees. Six to eight eggs are laid, which are white, thickly sprinkled with warm brown.

Mrs. Osgood Wright tells a pretty incident of the Chickadees, thus: "In the winter of 1891-2, when the cold was severe, the snow deep, and the tree trunks often covered with ice, the Chickadees repaired in flocks daily to the kennel of our old dog Colin and fed from his dish, hopping over his back and calling Chickadee, dee, dee, in his face, a proceeding that he never in the least resented, but seemed rather to enjoy it."

PROTHONOTARY YELLOW WARBLERS.

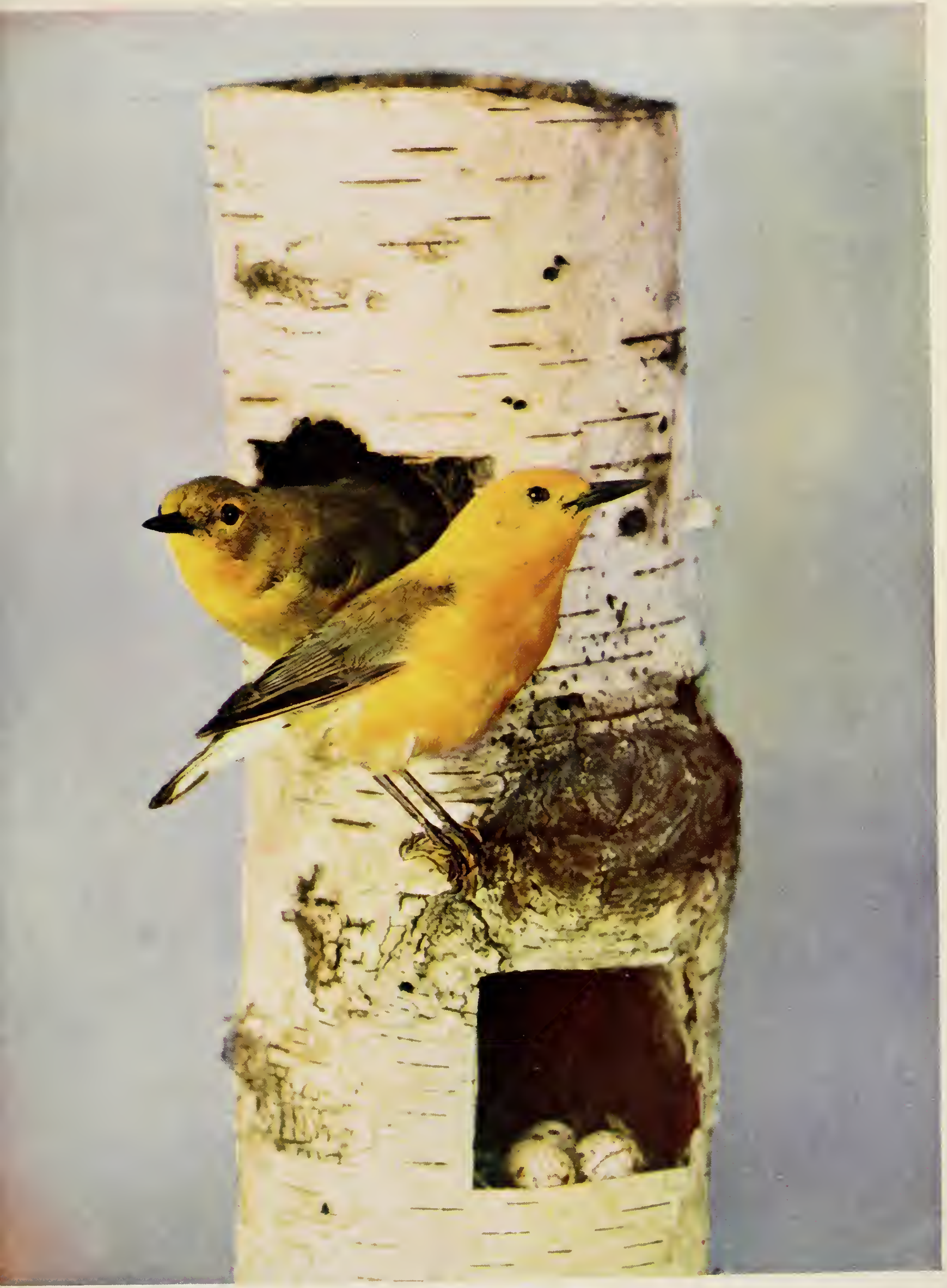
Quite a long name for such small birds—don't you think so? You will have to get your teacher to repeat it several times, I fear, before you learn it.

These little yellow warblers are just as happy as the pair of wrens I showed you in April "BIRDS." In fact, I suspect they are even happier, for their nest has been made and the eggs laid. What do you think of their house? Sometimes they find an old hole in a stump, one that a woodpecker has left, perhaps, and there build a nest. This year they have found a very pretty place to begin their housekeeping. What kind of tree is it? I thought I would show only the part of the tree that makes their home. I just believe some boy or girl who loves birds made those holes for them. Don't you think so? They have an upstairs and a down stairs, it seems.

Like the Wrens I wrote about last month, they prefer to live in swampy land and along rivers. They nearly always find a hole in a decayed willow tree for their nest—low down. This isn't a willow tree, though.

Whenever I show you a pair of birds, always pick out the father and the mother bird. You will usually find that one has more color than the other. Which one is it? Maybe you know why this is. If you don't I am sure your teacher can tell you. Don't you remember in the Bobolink family how differently Mr. and Mrs. Bobolink were dressed?

I think most of you will agree with me when I say this is one of the prettiest pictures you ever saw.



rom col. Chi. Acad. Sciences.

PROTHONOTARY WARBLER.

THE PROTHONTARY, OR GOLDEN SWAMP WARBLER.

THE Golden Swamp Warbler is one of the very handsomest of American birds, being noted for the pureness and mellowness of its plumage. Baird notes that the habits of this beautiful and interesting warbler were formerly little known, its geographical distribution being somewhat irregular and over a narrow range. It is found in the West Indies and Central America as a migrant, and in the southern region of the United States. Further west the range widens, and it appears as far north as Kansas, Central Illinois, and Missouri.

Its favorite resorts are creeks and lagoons overshadowed by large trees, as well as the borders of sheets of water and the interiors of forests. It returns early in March to the Southern states, but to Kentucky not before the last of April, leaving in October. A single brood only is raised in a season.

A very pretty nest is sometimes built within a Woodpecker's hole in a stump of a tree, not more than three feet high. Where this occurs the nest is not shaped round, but is made to conform to the irregular cavity of the stump. This cavity is deepest at one end, and the nest is closely packed with dried leaves, broken bits of grasses, stems, mosses, decayed wood, and other material, the upper part interwoven with fine roots, varying in size, but all strong, wiry, and slender, and lined with hair.

Other nests have been discovered which were circular in shape. In one instance the nest was built in a brace hole in a mill, where the birds could be watched closely as they carried in the materials. They were not alarmed by the presence of the observer but seemed quite tame.

So far from being noisy and vociferous, Mr. Ridgway describes it as one of the most silent of all the warblers, while Mr. W. Brewster maintains that in restlessness few birds equal this species. Not a nook or corner of his domain but is repeatedly visited during the day. "Now he sings a few times from the top of some tall willow that leans out over the stream, sitting motionless among the marsh foliage, fully aware, perhaps, of the protection afforded by his harmonizing tints. The next moment he descends to the cool shadows beneath, where dark, coffee-colored waters, the overflow of a pond or river, stretch back among the trees. Here he loves to hop about the floating drift-wood, wet by the lapping of pulsating wavelets, now following up some long, inclining, half submerged log, peeping into every crevice and occasionally dragging forth from its concealment a spider or small beetle, turning alternately its bright yellow breast and olive back towards the light; now jetting his beautiful tail, or quivering his wings tremulously, he darts off into some thicket in response to a call from his mate; or, flying to a neighboring tree trunk, clings for a moment against the mossy hole to pipe his little strain, or look up the exact whereabouts of some suspected insect prize."

THE INDIGO BUNTING.

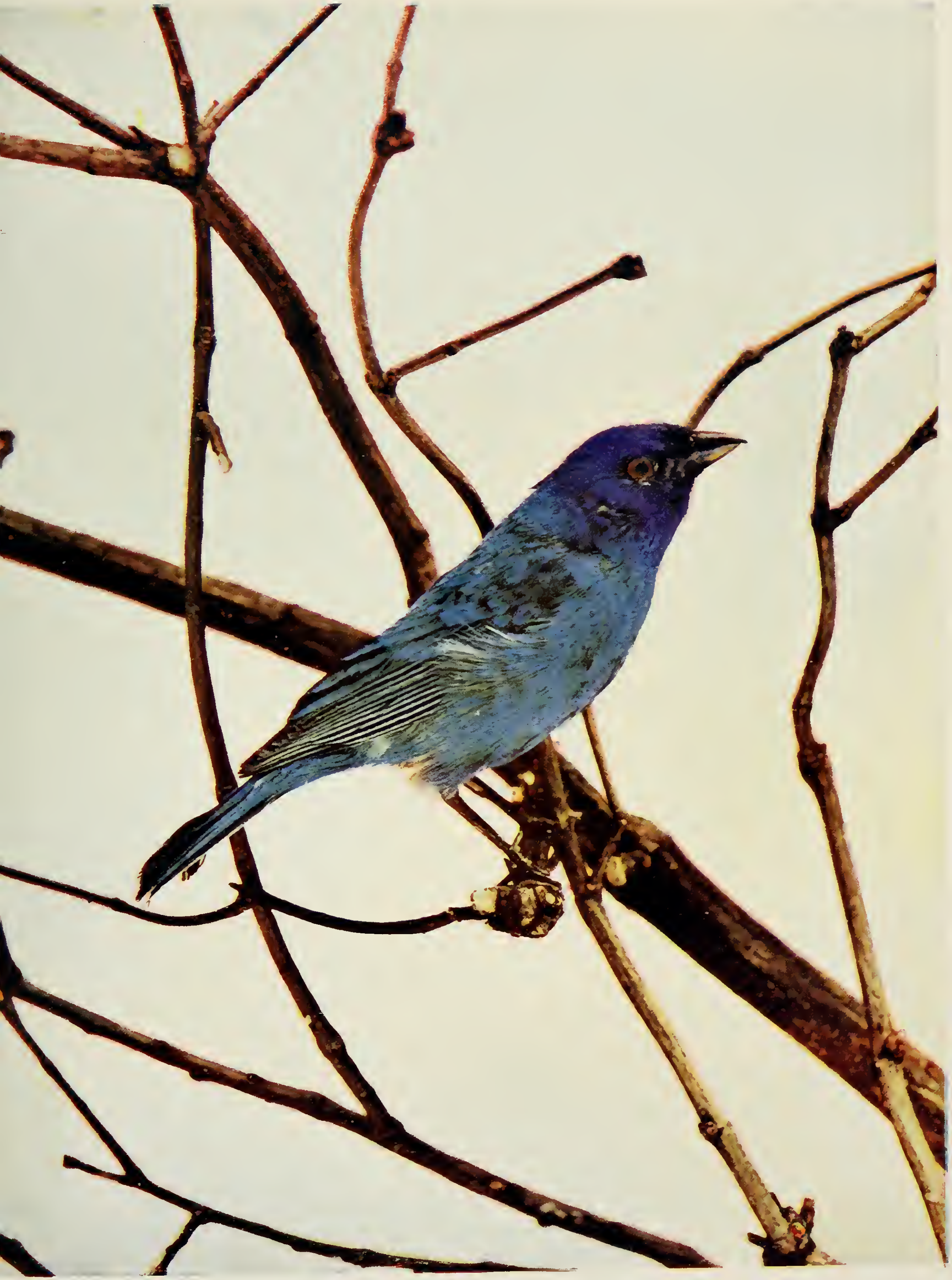
THE Indigo Bunting's arrival at its summer home is usually in the early part of May, where it remains until about the middle of September. It is numerous in the eastern and middle states, inhabiting the continent and seacoast islands from Mexico, where they winter, to Nova Scotia. It is one of the very smallest of our birds, and also one of the most attractive. Its favorite haunts are gardens, fields of deep clover, the borders of woods, and roadsides, where, like the Woodpecker, it is frequently seen perched on the fences.

It is extremely active and neat in its manners and an untiring singer, morning, noon, and night his rapid chanting being heard, sometimes loud and sometimes hardly audible, as if he were becoming quite exhausted by his musical efforts. He mounts the highest tops of a large tree and sings for half an hour together. The song is not one uninterrupted strain, but a repetition of short notes, "commencing loud and, rapid, and full, and by almost imperceptible gradations for six or eight seconds until they seem hardly articulated, as if the little minstrel were unable to stop, and, after a short pause, beginning again as before." Baskett says that in cases of serenade and wooing he may mount the tip sprays of tall trees as he sings and abandon all else to melody till the engrossing business is over.

The Indigo Bird sings with equal animation whether it be May or August, the vertical sun of the dog days having no diminishing effect upon his enthusiasm. It is well known that in certain lights his plumage appears of a rich sky blue, varying to a tint of vivid verdigris green, so that the bird, flitting from one place to another, appears to undergo an entire change of color.

The Indigo Bunting fixes his nest in a low bush, long rank grass, grain, or clover, suspended by two twigs, flax being the material used, lined with fine dry grass. It had been known, however, to build in the hollow of an apple tree. The eggs, generally five, are bluish or pure white. The same nest is often occupied season after season. One which had been used for five successive summers, was repaired each year with the same material, matting that the birds had evidently taken from the covering of grape vines. The nest was very neatly and thoroughly lined with hair.

The Indigo feeds upon the ground, his food consisting mainly of the seed of small grasses and herbs. The male while moulting assumes very nearly the color of the female, a dull brown, the rich plumage not returning for two or three months. Mrs. Osgood Wright says of this tiny creature: "Like all the bright-hued birds he is beset by enemies both of earth and sky, but his sparrow instinct, which has a love for mother earth, bids him build near the ground. The dangers of the nesting-time fall mostly to his share, for his dull brown mate is easily overlooked as an insignificant sparrow. Nature always gives a plain coat to the wives of these gayly dressed cavaliers, for her primal thought is the safety of the home and its young life."



m col. Chi. Acad. Sciences.

INDIGO BUNTING.

THE NIGHT HAWK.

THE range of the Night Hawk, also known as "Bull-bat," "Mosquito Hawk," "Will o' the Wisp," "Pisk," "Piramidig," and sometimes erroneously as "Whip-poor-will," being frequently mistaken for that bird, is an extensive one. It is only a summer visitor throughout the United States and Canada, generally arriving from its winter haunts in the Bahamas, or Central and South America in the latter part of April, reaching the more northern parts about a month later, and leaving the latter again in large straggling flocks about the end of August, moving leisurely southward and disappearing gradually along our southern border about the latter part of October. Major Bendire says its migrations are very extended and cover the greater part of the American continent.

The Night Hawk, in making its home, prefers a well timbered country. Its common name is somewhat of a misnomer, as it is not nocturnal in its habits. It is not an uncommon sight to see numbers of these birds on the wing on bright sunny days, but it does most of its hunting in cloudy weather, and in the early morning and evening, returning to rest soon after dark. On bright moonlight nights it flies later, and its calls are sometimes heard as late as eleven o'clock.

"This species is one of the most graceful birds on the wing, and its aerial evolutions are truly wonderful; one moment it may be seen soaring through space without any apparent movement of its pinions, and again its swift flight is accompanied by a good deal of rapid flapping of the wings, like that of Falcons, and this is more or less varied by numerous twistings and turnings. While constantly darting here and there in pursuit of its prey," says a traveler, "I have seen one of these birds shoot almost perpendicularly upward after an insect, with the swiftness of an arrow. The Night Hawk's tail appears to assist it greatly in these sudden zigzag changes, being partly expanded during most of its complicated movements."

Night Hawks are sociable birds, especially on the wing, and seem to enjoy each other's company. Their squeaking call note, sounding like "Speek-speek," is repeated at intervals. These aerial evolutions are principally confined to the mating season. On the ground the movements of this Hawk are slow, unsteady, and more or less laborious. Its food consists mainly of insects, such as flies and mosquitos, small beetles, grass-hoppers, and the small night-flying moths, all of which are caught on the wing. A useful bird, it deserves the fullest protection.

The favorite haunts of the Night Hawk are the edges of forests and clearings, burnt tracts, meadow lands along river bottoms, and cultivated fields, as well as the flat mansard roofs in many of our larger cities, to which it is attracted by the large amount of food found there, especially about electric lights. During the heat of the day the Night Hawk may be seen resting on limbs of trees, fence rails, the flat surface of lichen-covered rock, on stone walls, old logs, chimney tops, and on railroad tracks. It is very rare to find it on the ground.

The nesting-time is June and July. No nest is made, but two eggs are deposited on the bare ground, frequently in very exposed situations, or in slight depressions on flat rocks, between rows of corn, and the like. Only one brood is raised. The birds sit alternately for about sixteen days. There is endless variation in the marking of the eggs, and it is considered one of the most difficult to describe satisfactorily.

THE NIGHT HAWK.

As you will see from my name, I am a bird of the night. Daytime is not at all pleasing to me because of its brightness and noise.

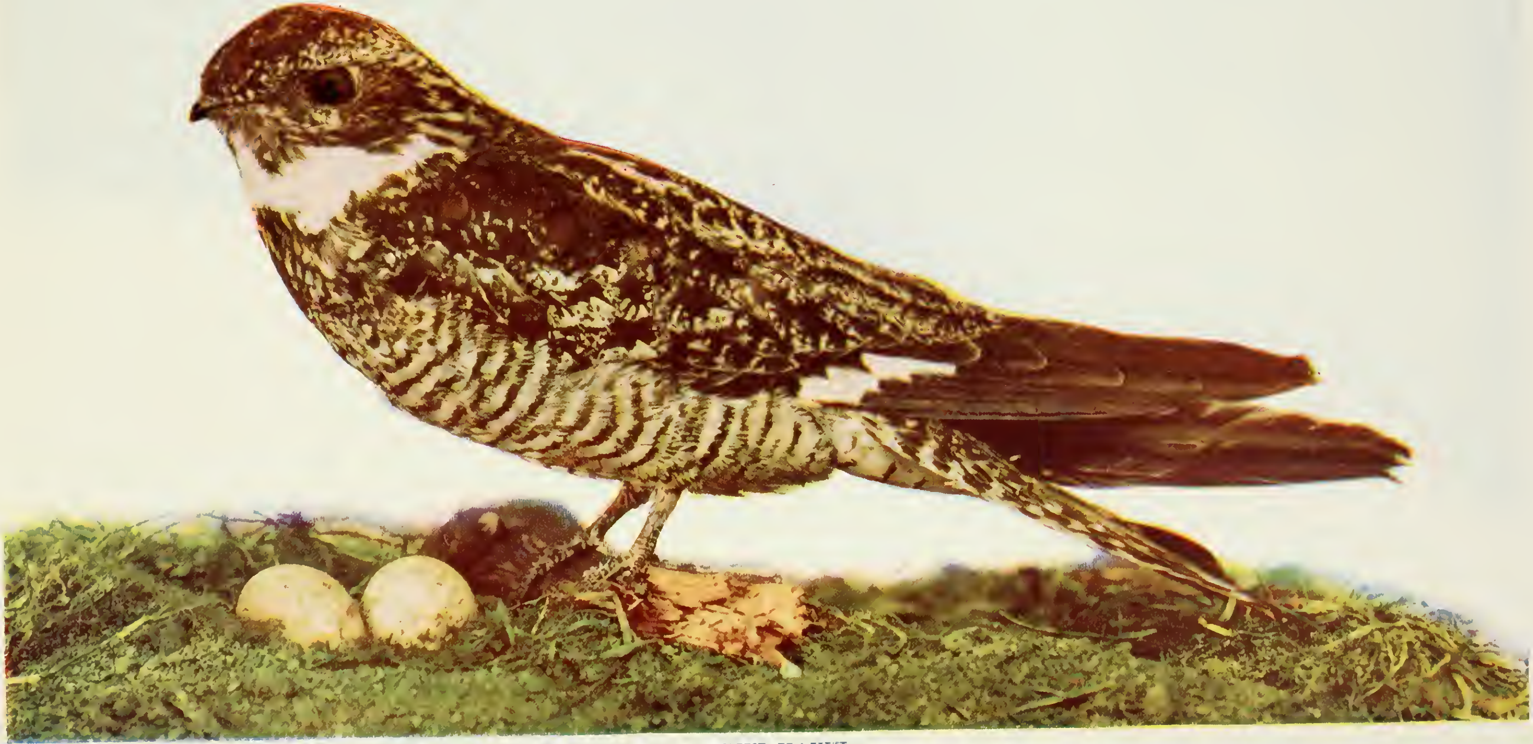
I like the cool, dark evenings when the insects fly around the house-tops. They are my food and it needs a quick bird to catch them. If you will notice my flight, you will see it is swift and graceful. When hunting insects we go in a crowd. It is seldom that people see us because of the darkness. Often we stay near a stream of water, for the fog which rises in the night hides us from the insects on which we feed.

None of us sing well—we have only a few doleful notes which frighten people who do not understand our habits.

In the daytime we seek the darkest part of the woods, and perch lengthwise on the branches of trees, just as our cousins the Whippoorwills do. We could perch crosswise just as well. Can you think why we do not? If there be no woods near, we just roost upon the ground.

Our plumage is a mottled brown—the same color of the bark on which we rest. Our eggs are laid on the ground, for we do not care to build nests. There are only two of them, dull white with grayish brown marks on them.

Sometimes we lay our eggs on flat roofs in cities, and stay there during the day, but we prefer the country where there is good pasture land. I think my cousin Whippoorwill is to talk to you next month. People think we are very much alike. You can judge for yourself when you see his picture.



From col. Chi. Acad. Sciences.

NIGHT HAWK.

THE WOOD THRUSH.

> "With what a clear
> And ravishing sweetness sang the plaintive Thrush;
> I love to hear his delicate rich voice,
> Chanting through all the gloomy day, when loud
> Amid the trees is dropping the big rain,
> And gray mists wrap the hill; foraye the sweeter
> His song is when the day is sad and dark."

So many common names has the Wood Thrush that he would seem to be quite well known to every one. Some call him the Bell Thrush, others Bell Bird, others again Wood Robin, and the French Canadians, who love his delicious song, Greve des Bois and Merle Taune. In spite of all this, however, and although a common species throughout the temperate portions of eastern North America, the Wood Thrush can hardly be said to be a well-known bird in the same sense as the Robin, the Cat-bird, or other more familiar species; "but to every inhabitant of rural districts his song, at least, is known, since it is of such a character that no one with the slightest appreciation of harmony can fail to be impressed by it."

Some writers maintain that the Wood Thrush has a song of a richer and more melodious tone than that of any other American bird; and that, did it possess continuity, would be incomparable.

Damp woodlands and shaded dells are favorite haunts of this Thrush, but on some occasions he will take up his residence in parks within large cities. He is not a shy bird, yet it is not often that he ventures far from the wild wood of his preference.

The nest is commonly built upon a horizontal branch of a low tree, from six to ten—rarely much more—feet from the ground. The eggs are from three to five in number, of a uniform greenish color; thus, like the nest, resembling those of the Robin, except that they are smaller.

In spite of the fact that his name indicates his preference for the woods, we have seen this Thrush, in parks and gardens, his brown back and spotted breast making him unmistakable as he hops over the grass for a few yards, and pauses to detect the movement of a worm, seizing it vigorously a moment after.

He eats ripening fruits, especially strawberries and gooseberries, but no bird can or does destroy so many snails, and he is much less an enemy than a friend of the gardener. It would be well if our park commissioners would plant an occasional fruit tree—cherry, apple, and the like—in the public parks, protecting them from the ravages of every one except the birds, for whose sole benefit they should be set aside. The trees would also serve a double purpose of ornament and use, and the youth who grow up in the city, and rarely ever see an orchard, would become familiar with the appearance of fruit trees. The birds would annually increase in numbers, as they would not only be attracted to the parks thereby, but they would build their nests and rear their young under far more favorable conditions than now exist. The criticism that birds are too largely destroyed by hunters should be supplemented by the complaint that they are also allowed to perish for want of food, especially in seasons of unusual scarcity or severity. Food should be scattered through the parks at proper times, nesting boxes provided—not a few, but many—and then

> The happy mother of every brood
> Will twitter notes of gratitude.

THE WOOD THRUSH.

The Bird of Solitude.

Of all the Thrushes this one is probably the most beautiful. I think the picture shows it. Look at his mottled neck and breast. Notice his large bright eye. Those who have studied birds think he is the most intelligent of them all.

He is the largest of the Thrushes and has more color in his plumage. All who have heard him agree that he is one of the sweetest singers among birds.

Unlike the Robin, Catbird, or Brown Thrush, he enjoys being heard and not seen.

His sweetest song may be heard in the cool of the morning or evening. It is then that his rich notes, sounding like a flute, are heard from the deep wood. The weather does not affect his song. Rain or shine, wet or dry, he sings, and sings, and sings.

During the light of day the Wood Thrush likes to stay in the cool shade of the woods. Along toward evening, after sunset, when other birds are settling themselves for the night, out of the wood you will hear his evening song.

It begins with a strain that sounds like, "Come with me," and by the time he finishes you are in love with his song.

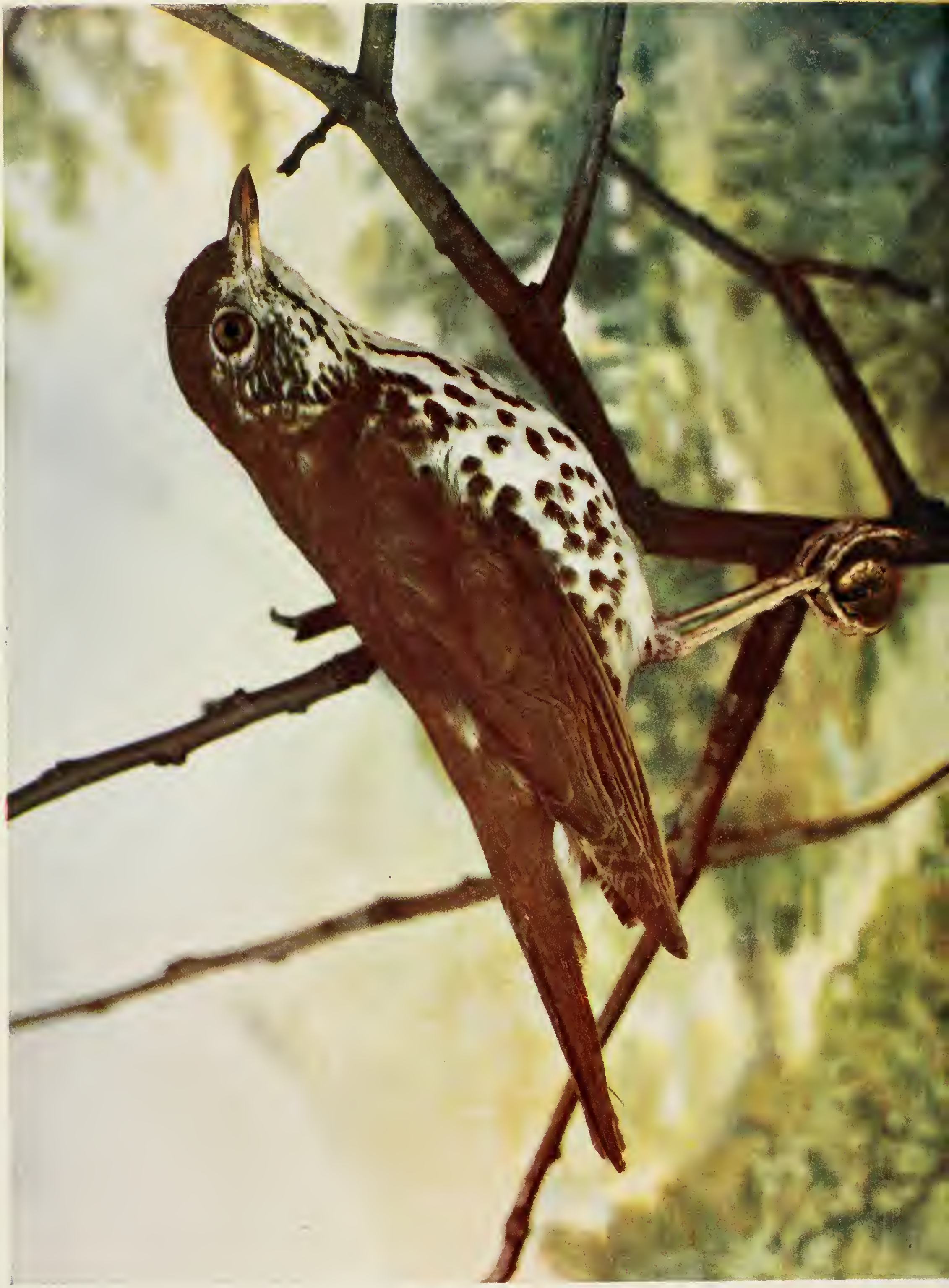
The Wood Thrush is very quiet in his habits. So different from the noisy, restless Catbird.

The only time that he is noisy is when his young are in danger. Then he is as active as any of them.

A Wood Thrush's nest is very much like a Robin's. It is made of leaves, rootlets and fine twigs woven together with an inner wall of mud, and lined with fine rootlets.

The eggs, three to five, are much like the Robin's.

Compare the picture of the Wood Thrush with that of the Robin or Brown Thrush and see which you think is the prettiest.



THE AMERICAN CATBIRD.

THE CATBIRD derives his name from a fancied resemblance of some of his notes to the mew of the domestic cat. He is a native of America, and is one of the most familiarly known of our famous songsters. He is a true thrush, and is one of the most affectionate of our birds. Wilson has well described his nature, as follows:

"In passing through the woods in summer I have sometimes amused myself with imitating the violent chirping or clucking of young birds, in order to observe what different species were round me; for such sounds at such a season in the woods are no less alarming to the feathered tenants of the bushes than the cry of fire or murder in the street is to the inhabitants of a large city. On such occasion of alarm and consternation, the Catbird is first to make his appearance, not single but sometimes half a dozen at a time, flying from different quarters to the spot. At this time those who are disposed to play on his feelings may almost throw him into a fit, his emotion and agitation are so great at what he supposes to be the distressful cries of his young. He hurries backward and forward, with hanging wings, open mouth, calling out louder and faster, and actually screaming with distress, until he appears hoarse with his exertions. He attempts no offensive means, but he wails, he implores, in the most pathetic terms with which nature has supplied him, and with an agony of feeling which is truly affecting. At any other season the most perfect imitations have no effect whatever on him."

The Catbird is a courageous little creature, and in defense of its young it is so bold that it will contrive to drive away any snake that may approach its nest, snakes being its special aversion. His voice is mellow and rich, and is a compound of many of the gentle trills and sweet undulations of our various woodland choristers, delivered with apparent caution, and with all the attention and softness necessary to enable the performer to please the ear of his mate. Each cadence passes on without faltering and you are sure to recognize the song he so sweetly imitates. While they are are all good singers, occasionally there is one which excels all his neighbors, as is frequently the case among canaries.

The Catbird builds in syringa bushes, and other shrubs. In New England he is best known as a garden bird. Mabel Osgood Wright, in "Birdcraft," says: "I have found it nesting in all sorts of places, from an alder bush, overhanging a lonely brook, to a scrub apple in an open field, never in deep woods, and it is only in its garden home, and in the hedging bushes of an adjoining field, that it develops its best qualities—'lets itself out,' so to speak. The Catbirds in the garden are so tame that they will frequently perch on the edge of the hammock in which I am sitting, and when I move they only hop away a few feet with a little flutter. The male is undoubtedly a mocker, when he so desires, but he has an individual and most delightful song, filled with unexpected turns and bouyant melody."

THE CATBIRD.

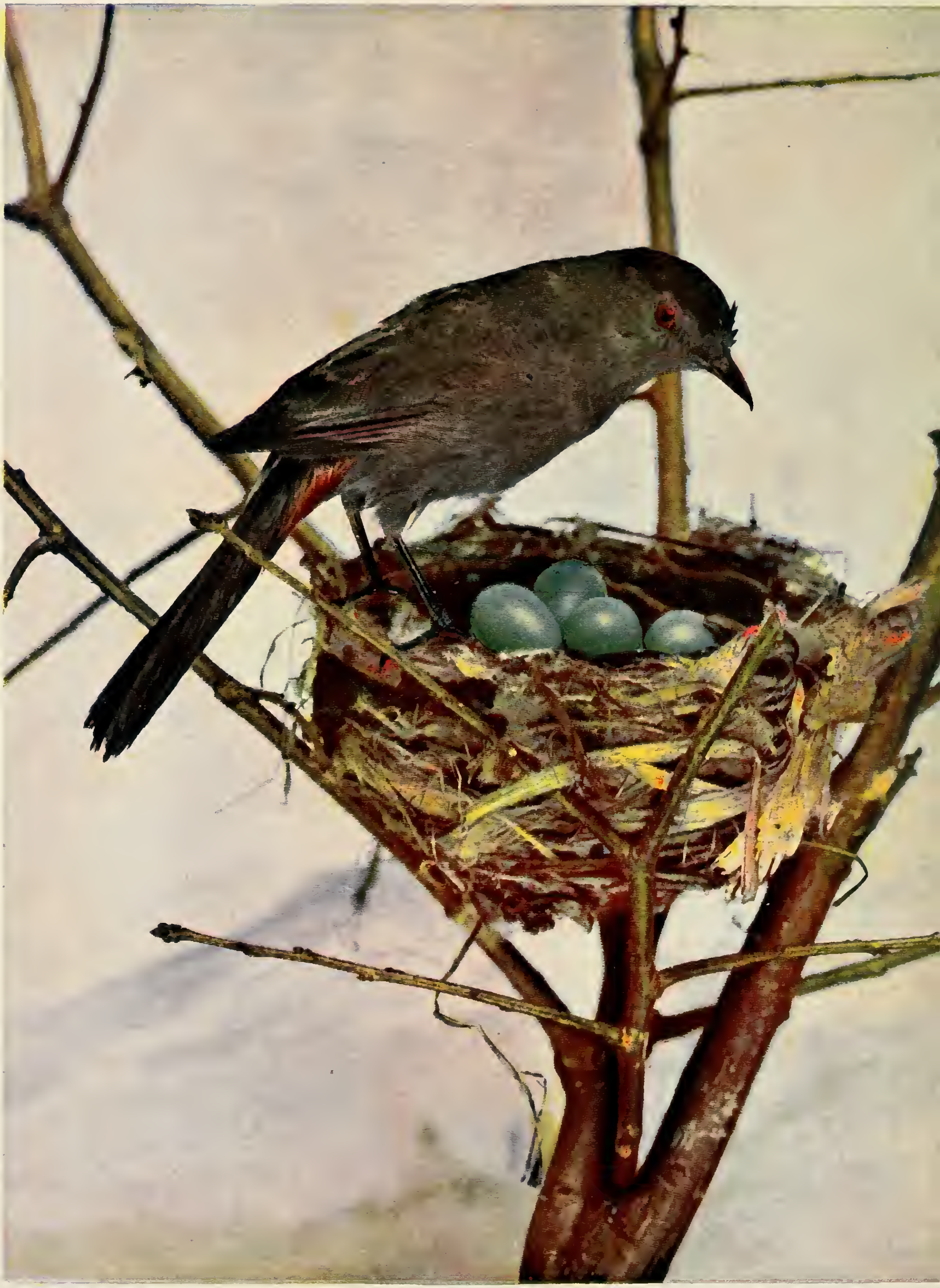
What do you think of this nest of eggs? What do you suppose Mrs. Catbird's thoughts are as she looks at them so tenderly? Don't you think she was very kind to let me take the nest out of the hedge where I found it, so you could see the pretty greenish blue eggs? I shall place it back where I got it. Catbirds usually build their nests in hedges, briars, or bushes, so they are never very high from the ground.

Did you ever hear the Catbird sing? He is one of the sweetest singers and his song is something like his cousin's, the Brown Thrush, only not so loud.

He can imitate the songs of other birds and the sounds of many animals. He can *mew* like a cat, and it is for this reason that he is called "Catbird." His sweetest song, though, is soft and mellow and is sung at just such times as this—when thinking of the nest, the eggs, or the young.

The Catbird is a good neighbor among birds. If any other bird is in trouble of any sort, he will do all he can to relieve it. He will even feed and care for little birds whose parents have left them. Don't you think he ought to have a prettier name? Now remember, the Catbird is a Thrush. I want you to keep track of all the Thrushes as they appear in "BIRDS." I shall try to show you a Thrush each month.

Next month you shall see the sweetest singer of American birds. He, too, is a Thrush. I wonder if you know what bird I mean. Ask your mamma to buy you a book called "Bird Ways." It was written by a lady who spent years watching and studying birds. She tells so many cute things about the Catbird.



From col. Chi. Acad. Sciences. CATBIRD. CHICAGO COLORTYPE C

BIRDS.

ILLUSTRATED BY COLOR PHOTOGRAPHY.

VOL. I. JUNE, 1897. NO. 6.

BIRD SONG.

> "I cannot love the man who doth not love,
> As men love light, the song of happy birds."

IT is indeed fitting that the great poets have ever been the best interpreters of the songs of birds. In many of the plays of Shakespeare, especially where the scene is laid in the primeval forest, his most delicious bits of fancy are inspired by the flitting throng. Wordsworth and Tennyson, and many of the minor English poets, are pervaded with bird notes, and Shelley's masterpiece, The Skylark, will long survive his greater and more ambitious poems. Our own poet, Cranch, has left one immortal stanza, and Bryant, and Longfellow, and Lowell, and Whittier, and Emerson have written enough of poetic melody, the direct inspiration of the feathered inhabitants of the woods, to fill a good-sized volume. In prose, no one has said finer things than Thoreau, who probed nature with a deeper ken than any of his contemporaries. He is to be read, and read, and read.

But just what meaning should be attached to a bird's notes—some of which are "the least disagreeable of noises"—will probably never be discovered. They do seem to express almost every feeling of which the human heart is capable. We wonder if the Mocking Bird understands what all these notes mean. He is so fine an imitator that it is hard to believe he is not doing more than mimicking the notes of other birds, but rather that he really does mock them with a sort of defiant sarcasm. He banters them less, perhaps, than the Cat Bird, but one would naturally expect all other birds to fly at him with vengeful purpose. But perhaps the birds are not so sensitive as their human brothers, who do not always look upon imitation as the highest flattery.

A gentleman who kept a note-book, describes one of the matinee performances of the Mocker, which he attended by creeping under a tent curtain. He sat at the foot of a tree on the top of which the bird was perched unconscious of his presence. The Mocker gave one of the notes of the Guinea-hen, a fine imitation of the Cardinal, or Red Bird, an exact reproduction of the note of the Phoebe, and some of the difficult notes of the Yellow-breasted Chat. "Now I hear a young chicken peeping. Now the Carolina Wren sings, '*cheerily, cheerily, cheerily.*' Now a small bird is shrilling with a fine insect tone. A Flicker, a Wood-pewee, and a Phoebe follow in quick succession. Then a Tufted Titmouse squeals. To display his versatility, he gives a dull performance which couples the '*go-back*' of the Guinea fowl with the plaint of the Wood-pewee, two widely diverse vocal sounds. With all the performance there is such perfect self-reliance and consciousness of superior ability that one feels that the singer has but to choose what bird he will imitate next."

Nor does the plaintive, melancholy note of the Robin, that "pious" bird, altogether express his character. He has so many lovely traits, according to his biographers, that we accept him unhesitatingly as a truly good bird. Didn't he once upon a time tenderly cover with leaves certain poor little wanderers? Isn't he called "The Bird of the Morning?" And evening as well, for you can hear his sad voice long after the sun has himself retired.

The poet Coleridge claims the credit of first using the Owl's cry in poetry, and his musical note *Tu-whit, tu-who!* has made him a favorite with the poets. Tennyson has fancifully played upon it in his little "Songs to the Owl," the last stanza of which runs:

> "I would mock thy chant anew;
> But I cannot mimic it,
> Not a whit of thy tuhoo,
> Thee to woo to thy tuwhit,
> Thee to woo to thy tuwhit.
>
> With a lengthen'd loud halloo,
> Tuwhoo, tuwhit, tuwhit, tuhoo-o-o."

But Coleridge was not correct in his claim to precedence in the use of the Owl's cry, for Shakespeare preceded him, and Tennyson's "First Song to the Owl" is modeled after that at the end of "Love's Labor Lost:"

> "When roasted crabs hiss in the bowl
> Then nightly sings the staring Owl,
> Tu-who;
> Tu-whit, tu-who, a merry note."

In references to birds, Tennyson is the most felicitous of all poets and the exquisite swallow-song in "The Princess" is especially recommended to the reader's perusal.

Birds undoubtedly sing for the same reasons that inspire to utterance all the animated creatures in the universe. Insects sing and bees, crickets, locusts, and mosquitos. Frogs sing, and mice, monkeys, and woodchucks. We have recently heard even an English Sparrow do something better than chipper; some very pretty notes escaped him, perchance, because his heart was overflowing with love-thoughts, and he was very merry, knowing that his affection was reciprocated. The elevated railway stations, about whose eaves the ugly, hastily built nests protrude everywhere, furnish ample explanation of his reasons for singing.

Birds are more musical at certain times of the day as well as at certain seasons of the year. During the hour between dawn and sunrise occurs the grand concert of the feathered folk. There are no concerts during the day—only individual songs. After sunset there seems to be an effort to renew the chorus, but it cannot be compared to the morning concert when they are practically undisturbed by man.

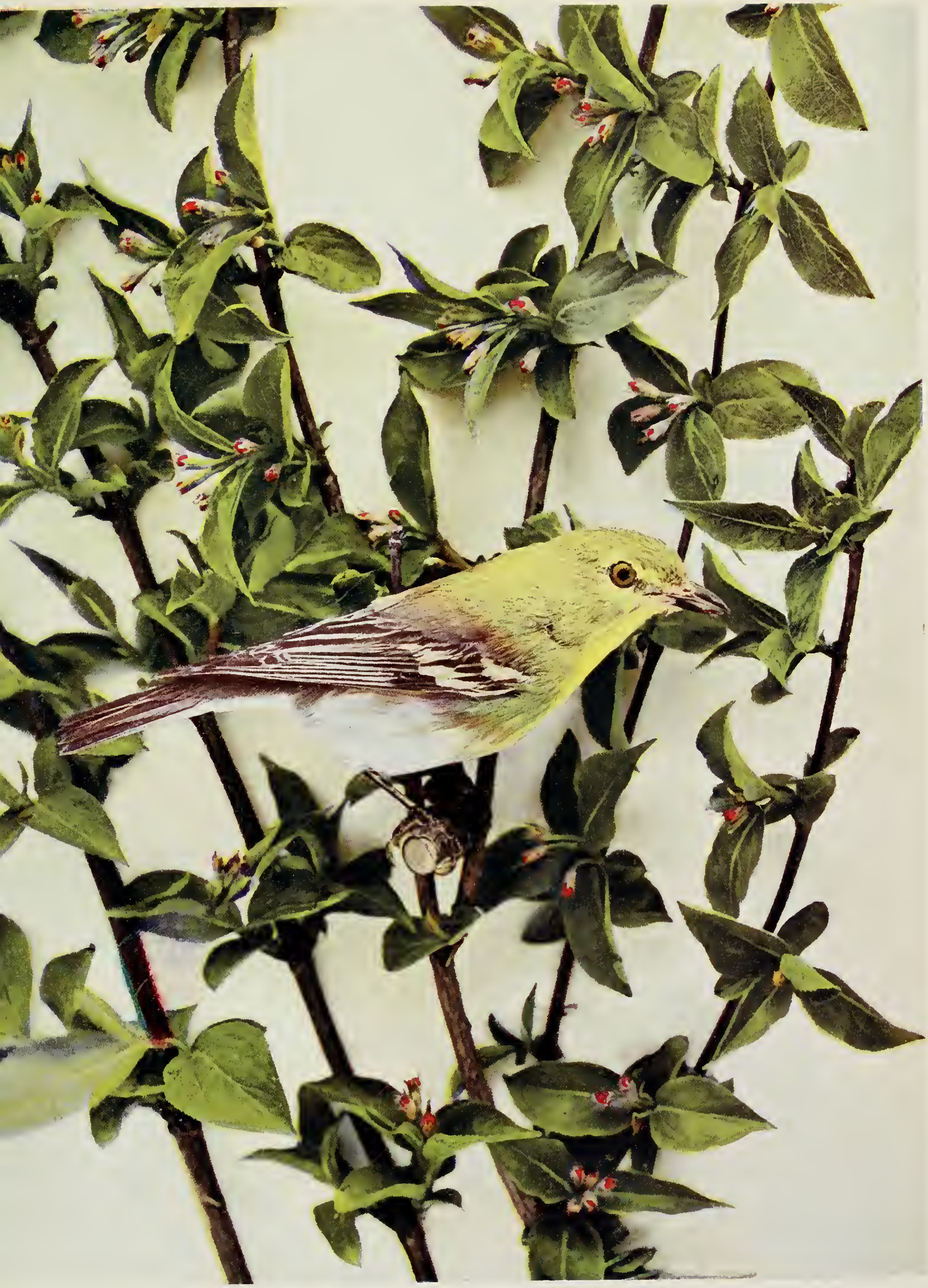
Birds sing because they are happy. Bradford Torrey has given with much felicity his opinion on the subject, as follows:

"I recall a Cardinal Grosbeak, whom I heard several years ago, on the bank of the Potomac river. An old soldier had taken me to visit the Great Falls, and as we were clambering over the rocks this Grosbeak began to sing; and soon, without any hint from me, and without knowing who the invisible musician was, my companion remarked upon the uncommon beauty of the song. The Cardinal is always a great singer, having a voice which, as European writers say, is almost equal to the Nightingale's; but in this case the more stirring, martial quality of the strain had given place to an exquisite mellowness, as if it were, what I have no doubt it was,

A Song of Love."

—C. C. MARBLE.

[TO BE CONTINUED.]



m col. F. M. Woodruff.

YELLOW-THROATED VIREO.

THE YELLOW-THROATED VIREO.

THE popular name of this species of an attractive family is Yellow Throated Greenlet, and our young readers will find much pleasure in watching its pretty movements and listening to its really delightful song whenever they visit the places where it loves to spend the happy hours of summer. In some respects it is the most remarkable of all the species of the family found in the United States. "The Birds of Illinois," a book that may be profitably studied by the young naturalist, states that it is decidedly the finest singer, has the loudest notes of admonition and reproof, and is the handsomest in plumage, and hence the more attractive to the student.

A recognized observer says he has found it only in the woods, and mostly in the luxuriant forests of the bottom lands. The writer's experience accords with that of Audubon and Wilson, the best authorities in their day, but the habits of birds vary greatly with locality, and in other parts of the country, notably in New England, it is very familiar, delighting in the companionship of man. It breeds in eastern North America, and winters in Florida, Cuba and Central America.

The Vireo makes a very deep nest, suspended by its upper edge, between the forks of a horizontal branch. The eggs are white, generally with a few reddish brown blotches. All authorities agree as to the great beauty of the nest, though they differ as to its exact location. It is a woodland bird, loving tall trees and running water, "haunting the same places as the Solitary Vireo." During migration the Yellow-throat is seen in orchards and in the trees along side-walks and lawns, mingling his golden colors with the rich green of June leaves.

The Vireos, or Greenlets, are like the Warblers in appearance and habits. We have no birds, says Torrey, that are more unsparing of their music; they sing from morning till night, and—some of them, at least—continue theirs till the very end of the season. The song of the Yellow-throat is rather too monotonous and persistent. It is hard sometimes not to get out of patience with its ceasless and noisy iteration of its simple tune; especially if you are doing your utmost to catch the notes of some rarer and more refined songster. This is true also of some other birds, whose occasional silence would add much to their attractiveness.

THE MOCKING BIRD.

Some bright morning this month, you may hear a Robin's song from a large tree near by. A Red Bird answers him and then the Oriole chimes in. I can see you looking around to find the birds that sing so sweetly. All this time a gay bird sits among the green leaves and laughs at you as you try to find three birds when only one is there.

It is the Mocking Bird or Mocker, and it is he who has been fooling you with his song. Nature has given him lots of music and gifted him with the power of imitating the songs of other birds and sounds of other animals.

He is certainly the sweetest of our song birds. The English Nightingale alone is his rival. I think, however, if our Mocker could hear the Nightingale's song, he could learn it.

The Mocking Bird is another of our Thrushes. By this time you have surely made up your minds that the Thrushes are sweet singers.

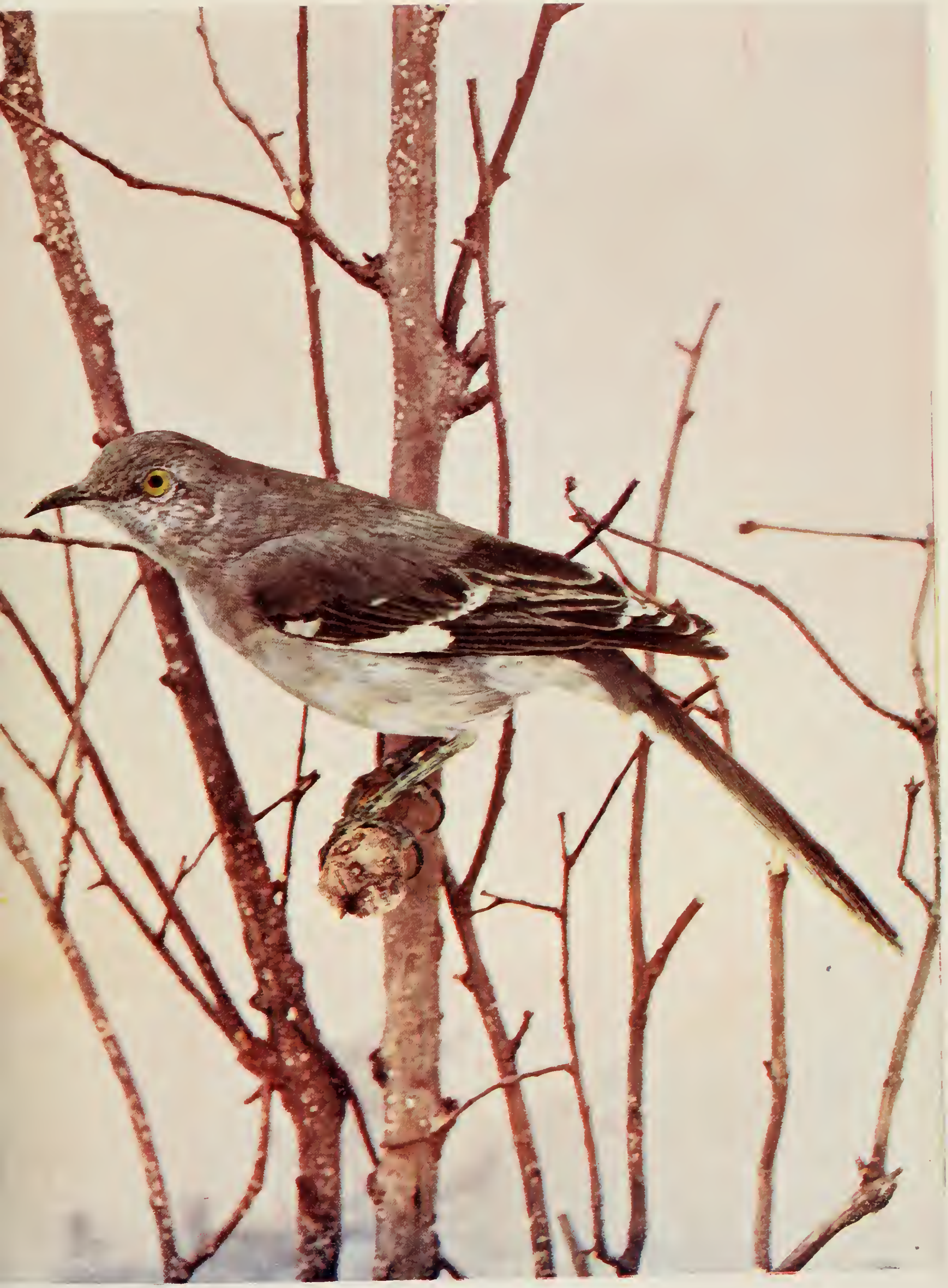
The Mocker seems to take delight in fooling people. One gentleman while sitting on his porch heard what he thought to be a young bird in distress. He went in the direction of the sound and soon heard the same cry behind him. He turned and went back toward the porch, when he heard it in another direction. Soon he found out that Mr. Mocking Bird had been fooling him, and was flying about from shrub to shrub making that sound.

His nest is carelessly made of almost anything he can find. The small, bluish-green eggs are much like the Catbird's eggs.

Little Mocking Birds look very much like the young of other Thrushes, and do not become Mockers like their parents, until they are full grown.

Which one of the other Thrushes that you have seen in BIRDS does the Mocking Bird resemble?

He is the only Thrush that sings while on the wing. All of the others sing only while perching.



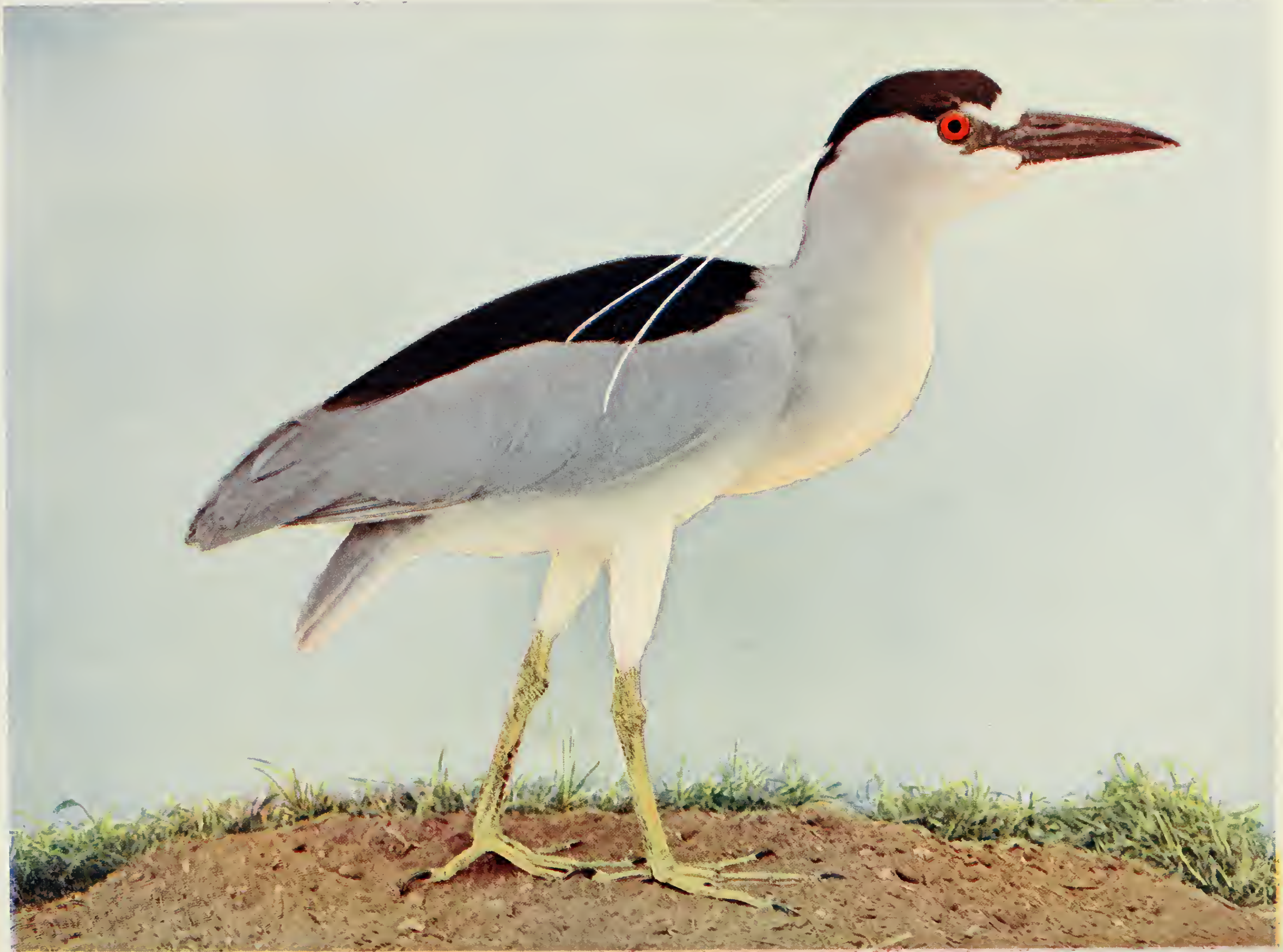
From col. F. M. Woodruff.

AMERICAN MOCKING BIRD.

JUNE.

Frank-hearted hostess of the field and wood,
Gipsy, whose roof is every spreading tree,
June is the pearl of our New England year,
Still a surprisal, though expected long,
Her coming startles. Long she lies in wait,
Makes many a feint, peeps forth, draws coyly back,
Then, from some southern ambush in the sky,
With one great gush of blossoms storms the world.
A week ago the Sparrow was divine;
The Bluebird, shifting his light load of song
From post to post along the cheerless fence,
Was as a rhymer ere the poet came ;
But now, O rapture! sunshine winged and voiced,
Pipe blown through by the warm, wild breath of the West,
Shepherding his soft droves of fleecy cloud,
Gladness of woods, skies, waters, all in one,
The Bobolink has come, and, like the soul
Of the sweet season vocal in a bird,
Gurgles in ecstasy we know not what
Save *June! Dear June! Now God be praised for June.*

—LOWELL.



THE BLACK-CROWNED NIGHT HERON.

WHAT a beautiful creature this is! A mounted specimen requires, like the Snowy Owl, the greatest care and a dust tight glass case to preserve its beauty. Dr. Coues' account of it should be read by those who are interested in the science of ornithology. It is a common bird in the United States and British Provinces, being migratory and resident in the south. Heronries, sometimes of vast extent, to which they return year after year, are their breeding places. Each nest contains three or four eggs of a pale, sea-green color. Observe the peculiar plumes, sometimes two, in this case three, which spring from the back of the head. These usually lie close together in one bundle, but are often blown apart by the wind in the form of streamers. This Heron derives its name from its habits, as it is usually seen flying at night, or in the early evening, when it utters a sonorous cry of *quaw* or *quawk*. It is often called Quawk or Qua-Bird.

On the return of the Black-Crowned Night Heron in April, he promptly takes possession of his former home, which is likely to be the most solitary and deeply shaded part of a cedar swamp. Groves of swamp oak in retired and water covered places, are also sometimes chosen, and the males often select tall trees on the bank of the river to roost upon during the day. About the beginning of twilight they direct their flight toward the marshes, uttering in a hoarse and hollow tone, the sound *qua*. At this hour all the nurseries in the swamps are emptied of their occupants, who disperse about the marshes along the ditches and river shore in search of food. Some of these nesting places have been occupied every spring and summer for many years by nearly a hundred pair of Herons. In places where the cedars have been cut down and removed the Herons merely move to another part of the swamp, not seeming greatly disturbed thereby; but when attacked and plundered they have been known to remove from an ancient home in a body to some unknown place.

The Heron's nest is plain enough, being built of sticks. On entering the swamp in the neighborhood of one of the heronries the noise of the old and young birds equals that made by a band of Indians in conflict. The instant an intruder is discovered, the entire flock silently rises in the air and removes to the tops of the trees in another part of the woods, while sentries of eight or ten birds make occasional circuits of inspection.

The young Herons climb to the tops of the highest trees, but do not attempt to fly. While it is probable these birds do not see well by day, they possess an exquisite faculty of hearing, which renders it almost impossible to approach their nesting places without discovery. Hawks hover over the nests, making an occasional sweep among the young, and the Bald Eagle has been seen to cast a hungry eye upon them.

The male and female can hardly be distinguished. Both have the plumes, but there is a slight difference in size.

The food of the Night Heron, or Qua-Bird, is chiefly fish, and his two interesting traits are tireless watchfulness and great appetite. He digests his food with such rapidity that however much he may eat, he is always ready to eat again; hence he is little benefited by what he does eat, and is ever in appearance in the same, half-starved state, whether food is abundant or scarce.

THE RING-BILLED GULL.

THE Ring-billed Gull is a common species throughout eastern North America, breeding throughout the northern tier of the United States, whose northern border is the limit of its summer home. As a rule in winter it is found in Illinois and south to the Gulf of Mexico. It is an exceedingly voracious bird, continually skimming over the surface of the water in search of its finny prey, and often following shoals of fish to great distances. The birds congregate in large numbers at their breeding places, which are rocky islands or headlands in the ocean. Most of the families of Gulls are somewhat migratory, visiting northern regions in summer to rear their young. The following lines give with remarkable fidelity the wing habits and movements of this tireless bird:

> "On nimble wing the gull
> Sweeps booming by, intent to cull
> Voracious, from the billows' breast,
> Marked far away, his destined feast.
> Behold him now, deep plunging, dip
> His sunny pinion's sable tip
> In the green wave; now highly skim
> With wheeling flight the water's brim;
> Wave in blue sky his silver sail
> Aloft, and frolic with the gale,
> Or sink again his breast to lave,
> And float upon the foaming wave.
> Oft o'er his form your eyes may roam,
> Nor know him from the feathery foam,
> Nor 'mid the rolling waves, your ear
> On yelling blast his clamor hear."

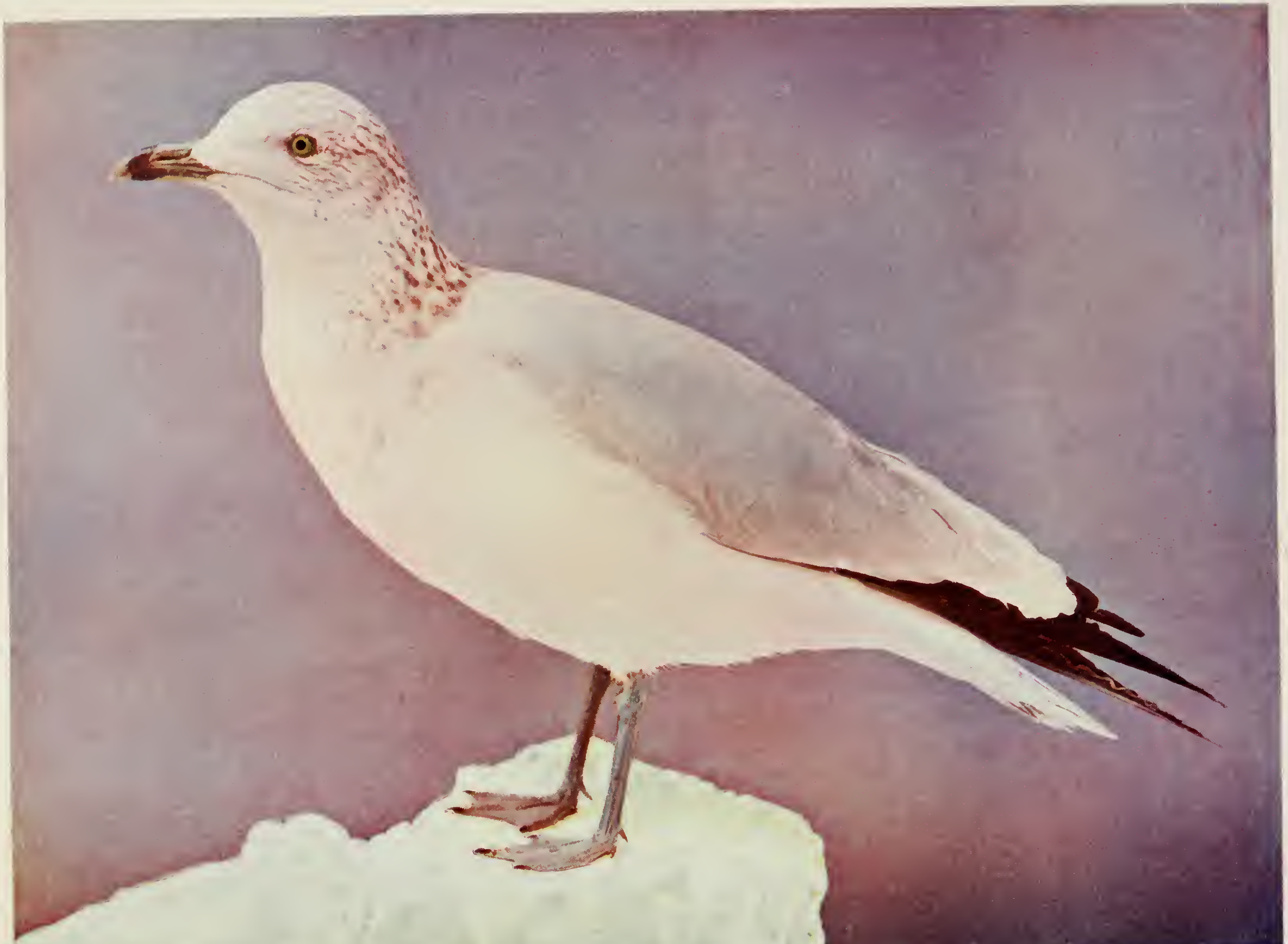
This Gull lives principally on fish, but also greedily devours insects. He also picks up small animals or animal substances with which he meets, and, like the vulture, devours them even in a putrid condition. He walks well and quickly, swims bouyantly, lying in the water like an air bubble, and dives with facility, but to no great depth.

As the breeding time approaches the Gulls begin to assemble in flocks, uniting to form a numerous host Even upon our own shores their nesting places are often occupied by many hundred pairs, whilst further north they congregate in countless multitudes. They literally cover the rocks on which their nests are placed, the brooding parents pressing against each other.

Wilson says that the Gull, when riding bouyantly upon the waves and weaving a sportive dance, is employed by the poets as an emblem of purity, or as an accessory to the horrors of a storm, by his shrieks and wild piercing cries. In his habits he is the vulture of the ocean, while in grace of motion and beauty of plumage he is one of the most attractive of the splendid denizens of the ocean and lakes.

The Ring-billed Gull's nest varies with localities. Where there is grass and sea weed, these are carefully heaped together, but where these fail the nest is of scanty material. Two to four large oval eggs of brownish green or greenish brown, spotted with grey and brown, are hatched in three or four weeks, the young appearing in a thick covering of speckled down. If born on the ledge of a high rock, the chicks remain there until their wings enable them to leave it, but if they come from the shell on the sand of the beach they trot about like little chickens. During the first few days they are fed with half-digested food from the parents' crops, and then with freshly caught fish.

The Gull rarely flies alone, though occasionally one is seen far away from the water soaring in majestic solitude above the tall buildings of the city.



THE MOCKING BIRD.

THE Mocking Bird is regarded as the chief of songsters, for in addition to his remarkable powers of imitation, he is without a rival in variety of notes. The Brown Thrasher is thought by many to have a sweeter song, and one equally vigorous, but there is a bold brilliancy in the performance of the Mocker that is peculiarly his own, and which has made him *par excellence* the forest extemporizer of vocal melody. About this of course there will always be a difference of opinion, as in the case of the human melodists.

So well known are the habits and characteristics of the Mocking Bird that nearly all that could be written about him would be but a repetition of what has been previously said. In Illinois, as in many other states, its distribution is very irregular, its absence from some localities which seem in every way suited being very difficult to account for. Thus, according to "Birds of Illinois," while one or two pairs breed in the outskirts of Mount Carmel nearly every season, it is nowhere in that vicinity a common bird. A few miles further north, however, it has been found almost abundant. On one occasion, during a three mile drive from town, six males were seen and heard singing along the roadside. Mr. H. K. Coale says that he saw a mocking bird in Stark county, Indiana, sixty miles southeast of Chicago, January 1, 1884; that Mr. Green Smith had met with it at Kensington Station, Illinois, and that several have been observed in the parks and door-yards of Chicago. In the extreme southern portion of the state the species is abundant, and is resident through the year.

The Mocking Bird does not properly belong among the birds of the middle or eastern states, but as there are many records of its nesting in these latitudes it is thought to be safe to include it. Mrs. Osgood Wright states that individuals have often been seen in the city parks of the east, one having lived in Central Park, New York city, late into the winter, throughout a cold and extreme season. They have reared their young as far north as Arlington, near Boston, where they are noted, however, as rare summer residents. Dr. J. A. Allen, editor of *The Auk*, notes that they occasionally nest in the Connecticut Valley.

The Mocking Bird has a habit of singing and fluttering in the middle of the night, and in different individuals the song varies, as is noted of many birds, particularly canaries. The song is a natural love song, a rich dreamy melody. The mocking song is imitative of the notes of all the birds of field, forest, and garden, broken into fragments.

The Mocker's nest is loosely made of leaves and grass, rags, feathers, etc., plain and comfortable. It is never far from the ground. The eggs are four to six, bluish green, spattered with shades of brown.

Wilson's description of the Mocking Bird's song will probably never be surpassed: "With expanded wings and tail glistening with white, and the bouyant gayety of his action arresting the eye, as his song does most irresistably the ear, he sweeps around with enthusiastic ecstacy, and mounts and descends as his song swells or dies away. And he often deceives the sportsman, and sends him in search of birds that are not perhaps within miles of him, but whose notes he exactly imitates."

Very useful is he, eating large spiders and grasshoppers, and the destructive cottonworm.

THE LOGGERHEAD SHRIKE.

A RAMBLER in the fields and woodlands during early spring or the latter part of autumn is often surprised at finding insects, grasshoppers, dragon flies, beetles of all kinds, and even larger game, mice, and small birds, impaled on twigs and thorns. This is apparently cruel sport, he observes, if he is unacquainted with the Butcher Bird and his habits, and he at once attributes it to the wanton sport of idle children who have not been led to say,

> With hearts to love, with eyes to see,
> With ears to hear their minstrelsy;
> Through us no harm, by deed or word,
> Shall ever come to any bird.

If he will look about him, however, the real author of this mischief will soon be detected as he appears with other unfortunate little creatures, which he requires to sustain his own life and that of his nestlings. The offender he finds to be the Shrike of the northern United States, most properly named the Butcher Bird. Like all tyrants he is fierce and brave only in the presence of creatures weaker than himself, and cowers and screams with terror if he sees a falcon. And yet, despite this cruel proceeding, which is an implanted instinct like that of the dog which buries bones he never seeks again, there are few more useful birds than the Shrike. In the summer he lives on insects, ninety-eight per cent. of his food for July and August consisting of insects, mainly grasshoppers; and in winter, when insects are scarce, mice form a very large proportion of his food.

The Butcher Bird has a very agreeable song, which is soft and musical, and he often shows cleverness as a mocker of other birds. He has been taught to whistle parts of tunes, and is as readily tamed as any of our domestic songsters.

The nest is usually found on the outer limbs of trees, often from fifteen to thirty feet from the ground. It is made of long strips of the inner bark of bass-wood, strengthened on the sides with a few dry twigs, stems, and roots, and lined with fine grasses. The eggs are often six in number, of a yellowish or clayey-white, blotched and marbled with dashes of purple, light brown, and purplish gray. Pretty eggs to study.

Readers of BIRDS who are interested in eggs do not need to disturb the mothers on their nests in order to see and study them. In all the great museums specimens of the eggs of nearly all birds are displayed in cases, and accurately colored plates have been made and published by the Smithsonian Institution and others. The Chicago Academy of Sciences has a fine collection of eggs. Many persons imagine that these institutions engage in cruel slaughter of birds in order to collect eggs and nests. This, of course, is not true, only the fewest number being taken, and with the exclusive object of placing before the people, not for their amusement but rather for their instruction, specimens of birds and animals which shall serve for their identification in forest and field.

The Loggerhead Shrike and nest shown in this number were taken under the direction of Mr. F. M. Woodruff, at Worth, Ill., about fourteen miles from Chicago. The nest was in a corner of an old hedge of Osage Orange, and about eight feet from the ground. He says in the *Osprey* that it took considerable time and patience to build up a platform of fence boards and old boxes to enable the photographer to do his work. The half-eaten body of a young garter snake was found about midway between the upper surface of the nest and the limb above, where it had been hung up for future use.

THE BALTIMORE ORIOLE.

BALTIMORE Orioles are inhabitants of the whole of North America, from Canada to Mexico. They enter Louisiana as soon as spring commences there. The name of Baltimore Oriole has been given it, because its colors of black and orange are those of the family arms of Lord Baltimore, to whom Maryland formerly belonged. Tradition has it that George Calvert, the first Baron Baltimore, worn out and discouraged by the various trials and rigours of temperature experienced in his Newfoundland colony in 1628, visited the Virginia settlement. He explored the waters of the Chesapeake, and found the woods and shores teeming with birds, among them great flocks of Orioles, which so cheered him by their beauty of song and splendor of plumage, that he took them as good omens and adopted their colors for his own.

When the Orioles first arrive the males are in the majority; they sit in the spruces calling by the hour, with lonely querulous notes. In a few days however, the females appear, and then the martial music begins, the birds' golden trumpeting often turning to a desperate clashing of cymbals when two males engage in combat, for "the Oriole has a temper to match his flaming plumage and fights with a will."

This Oriole is remarkably familiar, and fearless of man, hanging its beautiful nest upon the garden trees, and even venturing into the street wherever a green tree flourishes. The materials of which its nest is made are flax, various kinds of vegetable fibers, wool, and hair, matted together so as to resemble felt in consistency. A number of long horse-hairs are passed completely through the fibers, sewing it firmly together with large and irregular, but strong and judiciously placed stitching. In one of these nests an observer found that several of the hairs used for this purpose measured two feet in length. The nest is in the form of a long purse, six or seven inches in depth, three or four inches in diameter ; at the bottom is arranged a heap of soft material in which the eggs find a warm resting place. The female seems to be the chief architect, receiving a constant supply of materials from her mate, occasionally rejecting the fibres or hairs which he may bring, and sending him off for another load more to her taste.

Like human builders, the bird improves in nest building by practice, the best specimens of architecture being the work of the oldest birds, though some observers deny this.

The eggs are five in number, and their general color is whitish-pink, dotted at the larger end with purplish spots, and covered at the smaller end with a great number of fine intersecting lines of the same hue.

In spring the Oriole's food seems to be almost entirely of an animal nature, consisting of caterpillars, beetles, and other insects, which it seldom pursues on the wing, but seeks with great activity among the leaves and branches. Its also eats ripe fruit. The males of this elegant species of Oriole acquire the full beauty of their plumage the first winter after birth.

The Baltimore Oriole is one of the most interesting features of country landscape, his movements, as he runs among the branches of trees, differing from those of almost all other birds. Watch him clinging by the feet to reach an insect so far away as to require the full extension of the neck, body, and legs without letting go his hold. He glides, as it were, along a small twig, and at other times moves sidewise for a few steps. His motions are elegant and stately.

THE BALTIMORE ORIOLE.

About the middle of May, when the leaves are all coming out to see the bright sunshine, you may sometimes see, among the boughs, a bird of beautiful black and orange plumage.

He looks like the Orchard Oriole, whose picture you saw in May "Birds." It is the Baltimore Oriole. He has other names, such as "Golden Robin," "Fire Bird." "Hang-nest." I could tell you how he came to be called Baltimore Oriole, but would rather you'd ask your teacher about it. She can tell you all about it, and an interesting story it is. I assure you.

You see from the picture why he is called "Hang-nest." Maybe you can tell why he builds his nest that way.

The Orioles usually select for their nest the longest and slenderest twigs, way out on the highest branches of a large tree. They like the elm best. From this they hang their bag-like nest.

It must be interesting to watch them build the nest, and it requires lots of patience, too, for it usually takes a week or ten days to build it.

They fasten both ends of a string to the twigs between which the nest is to hang. After fastening many strings like this, so as to cross one another, they weave in other strings crosswise, and this makes a sort of bag or pouch. Then they put in the lining.

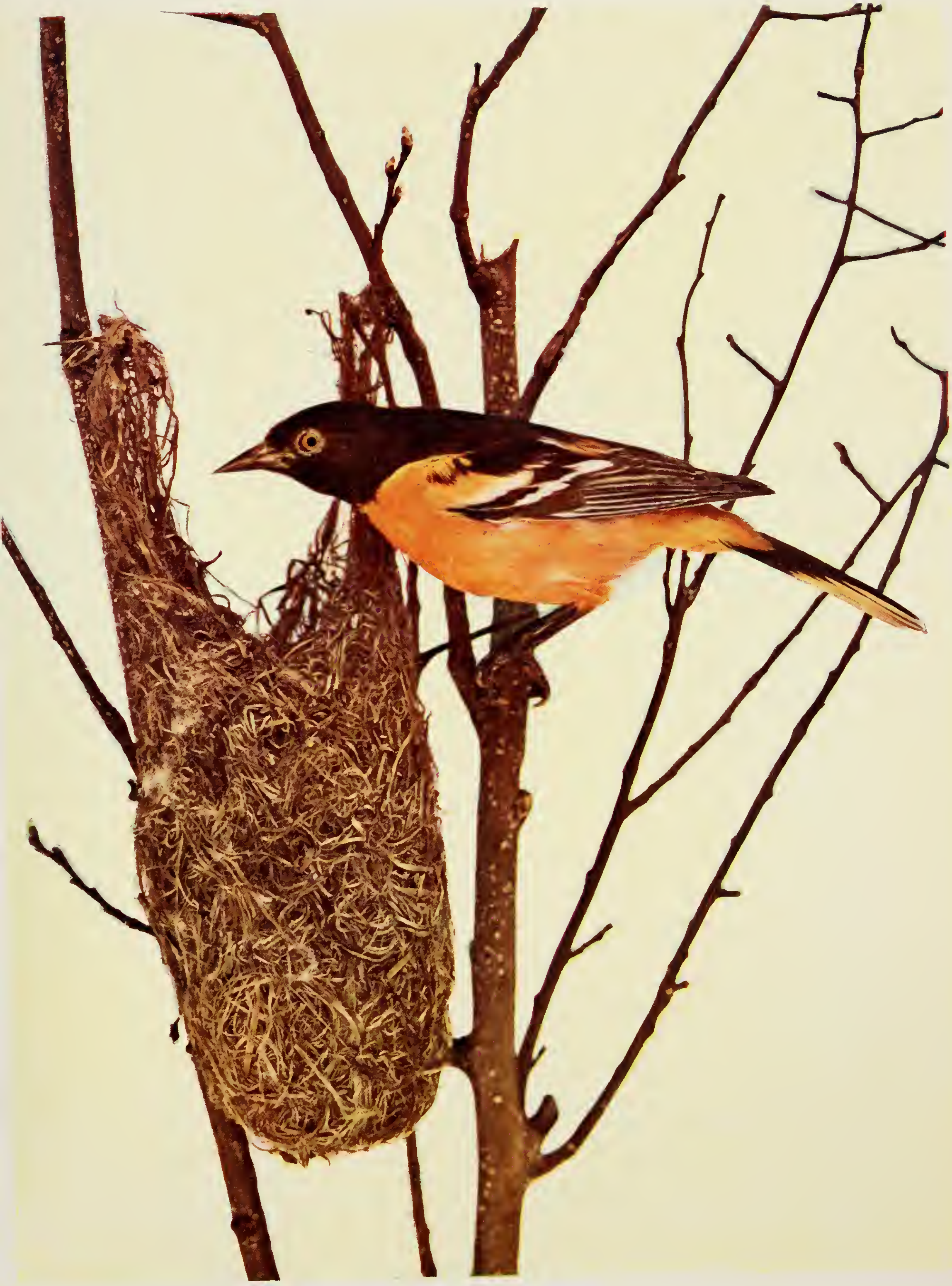
Of course, it swings and rocks when the wind blows, and what a nice cradle it must be for the baby Orioles?

Orioles like to visit orchards and eat the bugs, beetles and caterpillars that injure the trees and fruit.

There are few birds who do more good in this way than Orioles.

Sometimes they eat grapes from the vines and peck at fruit on the trees. It is usually because they want a drink that they do this.

One good man who had a large orchard and vineyard placed pans of water in different places. Not only the Orioles, but other birds, would go to the pan for a drink, instead of pecking at the fruit. Let us think of this, and when we have a chance, give the birds a drink of water. They will repay us with their sweetest songs.



From col. F. M. Woodruff.

BALTIMORE ORIOLE.

THE SNOWY OWL.

FEW of all the groups of birds have such decided markings, such characteristic distinctions, as the Owl. There is a singular resemblance between the face of an Owl and that of a cat, which is the more notable, as both of these creatures have much the same habits, live on the same prey, and are evidently representatives of the same idea in their different classes. The Owl, in fact, is a winged cat, just as the cat is a furred owl.

The Snowy Owl is one of the handsomest of this group, not so much on account of its size, which is considerable, as by reason of the beautiful white mantle which it wears, and the large orange eyeballs that shine with the lustre of a topaz set among the snowy plumage.

It is a native of the north of Europe and America, but is also found in the more northern parts of England, being seen, though rather a scarce bird, in the Shetland and Orkney Islands, where it builds its nest and rears its young. One will be more likely to find this owl near the shore, along the line of salt marshes and woody stubble, than further inland. The marshes do not freeze so easily or deep as the iron bound uplands, and field-mice are more plentiful in them. It is so fleet of wing that if its appetite is whetted, it can follow and capture a Snow Bunting or a Junco in its most rapid flight.

Like the Hawk Owl, it is a day-flying bird, and is a terrible foe to the smaller mammalia, and to various birds. Mr. Yarrell in his "History of the British Birds," states that one wounded on the Isle of Balta disgorged a young rabbit whole, and that a young Sandpiper, with its plumage entire, was found in the stomach of another.

In proportion to its size the Snowy Owl is a mighty hunter, having been detected chasing the American hare, and carrying off wounded Grouse before the sportsman could secure his prey. It is also a good fisherman, posting itself on some convenient spot overhanging the water, and securing its finny prey with a lightning-like grasp of the claw as it passes beneath the white clad fisher. Sometimes it will sail over the surface of a stream, and snatch the fish as they rise for food. It is also a great lover of lemmings, and in the destruction of these quadruped pests does infinite service to the agriculturist.

The large round eyes of this owl are very beautiful. Even by daylight they are remarkable for their gem-like sheen, but in the evening they are even more attractive, glowing like balls of living fire.

From sheer fatigue these birds often seek a temporary resting place on passing ships. A solitary owl, after a long journey, settled on the rigging of a ship one night. A sailor who was ordered aloft, terrified by the two glowing eyes that suddenly opened upon his own, descended hurriedly to the deck, declaring to the crew that he had seen "Davy Jones a-sitting up there on the main yard."

THE SNOWY OWL.

What do you think of this bird with his round, puffy head? You of course know it is an Owl. I want you to know him as the Snowy Owl.

Don't you think his face is some like that of your cat? This fellow is not full grown, but only a child. If he were full grown he would be pure white. The dark color you see is only the tips of the feathers. You can't see his beak very well for the soft feathers almost cover it.

His large soft eyes look very pretty out of the white feathers. What color would you call them? Most owls are quiet during the day and very busy all night. The Snowy Owl is not so quiet day times. He flies about considerably and gets most of his food in daylight.

A hunter who was resting under a tree, on the bank of a river, tells this of him:

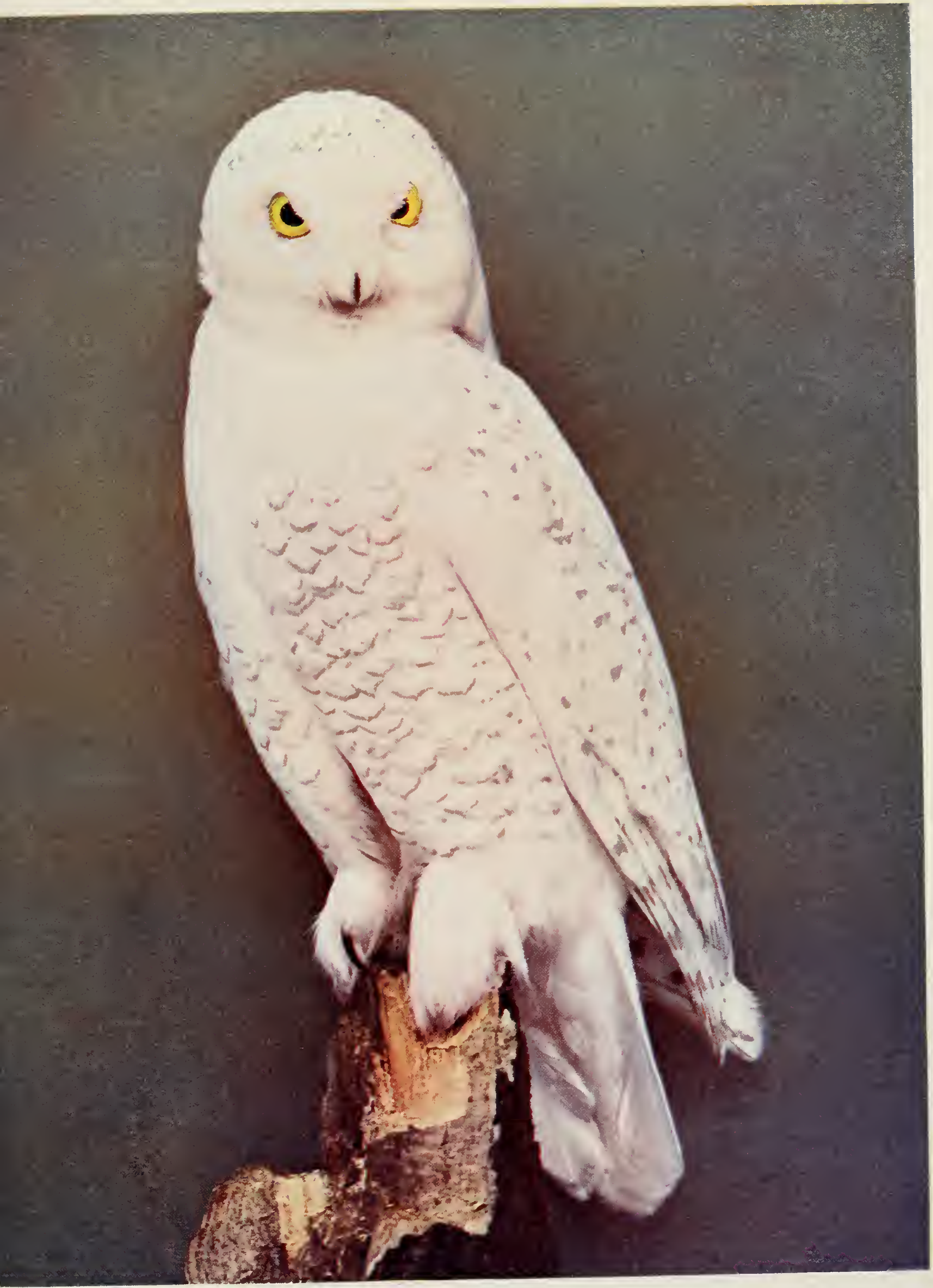
"A Snowy Owl was perched on the branch of a dead tree that had fallen into the river. He sat there looking into the water and blinking his large eyes.

Suddenly he reached out and before I could see how he did it, a fish was in his claws."

This certainly shows that he can see well in the day time. He can see best, however, in the twilight, in cloudy weather or moonlight. That is the way with your cat.

The wing feathers of the owl are different from those of most birds. They are as soft as down. This is why you cannot hear him when he flies. Owls while perching are almost always found in quiet places where they will not be disturbed.

Did you ever hear the voice of an owl in the night? If you never have, you cannot imagine how dreary it sounds. He surely is "The Bird of the Night."



om col. Chi. Acad. Sciences.

SNOWY OWL.

BIRDS AND FARMERS.

From the Forest and Stream.

THE advocates of protection for our small birds present two sets of reasons for preventing their killing; the one sentimental, and the other economic.

The sentimental reasons are the ones most often urged; they are also of a kind to appeal with especial force to those whose responsibility for the destruction of the birds is greatest. The women and girls, for whose adornment birds' plumage is chiefly used, think little and know less about the services which birds perform for agriculture, and indeed it may be doubted whether the sight of a bunch of feathers or a stuffed bird's skin suggests to them any thought of the life that those feathers once represented. But when the wearers are reminded that there was such a life; that it was cheery and beautiful, and that it was cut short merely that their apparel might be adorned, they are quick to recognize that bird destruction involves a wrong, and are ready to do their part toward ending it by refusing to wear plumage.

The small boy who pursues little birds from the standpoint of the hunter in quest of his game, feels only the ardor of pursuit. His whole mind is concentrated on that and the hunter's selfishness, the desire of possession, fills his heart. Ignorance and thoughtlessness destroy the birds.

Every one knows in a general way that birds render most valuable service to the farmer, but although these services have long been recognized in the laws standing on the statute books of the various states, it is only within a few years that any systematic investigations have been undertaken to determine just what such services are, to measure them with some approach to accuracy, to weigh in the case of each species the good and the evil done, and so to strike a balance in favor of the bird or against it. The inquiries carried on by the Agricultural Department on a large scale and those made by various local experiment stations and by individual observers have given results which are very striking and which can no longer be ignored.

It is a difficult matter for any one to balance the good things that he reads and believes about any animal against the bad things that he actually sees. The man who witnesses the theft of his cherries by robin or catbird, or the killing of a quail by a marsh hawk, feels that here he has ocular proof of harm done by the birds, while as to the insects or the field mice destroyed, and the crops saved, he has only the testimony of some unknown and distant witness. It is only natural that the observer should trust the evidence of his senses, and yet his eyes tell him only a small part of the truth, and that small part a misleading one.

It is certain that without the services of these feathered laborers, whose work is unseen, though it lasts from daylight till dark through every day in the year, agriculture in this country would come to an immediate standstill, and if in the brief season of fruit each one of these workers levies on the farmer the tribute of a few berries, the price is surely a small one to pay for the great good done. Superficial persons imagine that the birds are here only during the summer, but this is a great mistake. It is true that in warm weather, when insect life is most abundant, birds are also most abundant. They wage an effective and unceasing war against the adult insects and their larvæ, and check their active depredations; but in winter the birds carry on a campaign which is hardly less important in its results.

THE SCARLET TANAGER.

ONE of the most brilliant and striking of all American birds is the Scarlet Tanager. From its black wings resembling pockets, it is frequently called the "Pocket Bird." The French call it the "Cardinal." The female is plain olive-green, and when seen together the pair present a curious example of the prodigality with which mother nature pours out her favors of beauty in the adornment of some of her creatures and seems niggardly in her treatment of others. Still it is only by contrast that we are enabled to appreciate the quality of beauty, which in this case is of the rarest sort. In the January number of BIRDS we presented the Red Rumped Tanager, a Costa Rica bird, which, however, is inferior in brilliancy to the Scarlet, whose range extends from eastern United States, north to southern Canada, west to the great plains, and south in winter to northern South America. It inhabits woodlands and swampy places. The nesting season begins in the latter part of May, the nest being built in low thick woods or on the skirting of tangled thickets; very often also, in an orchard, on the horizontal limb of a low tree or sapling. It is very flat and loosely made of twigs and fine bark strips and lined with rootlets and fibres of inner bark.

The eggs are from three to five in number, and of a greenish blue, speckled and blotted with brown, chiefly at the larger end.

The disposition of the Scarlet Tanager is retiring, in which respect he differs greatly from the Summer Tanager, which frequents open groves, and often visits towns and cities. A few may be seen in our parks, and now and then children have picked up the bright dead form from the green grass, and wondered what might be its name. Compare it with the Redbird, with which it is often confounded, and the contrast will be striking.

His call is a warble, broken by a pensive call note, sounding like the syllables *chip-churr*, and he is regarded as a superior musician.

"Passing through an orchard, and seeing one of these young birds that had but lately left the nest, I carried it with me for about half a mile to show it to a friend, and having procured a cage," says Wilson, "hung it upon one of the large pine trees in the Botanic Garden, within a few feet of the nest of an Orchard Oriole, which also contained young, hoping that the charity and kindness of the Orioles would induce them to supply the cravings of the stranger. But charity with them as with too many of the human race, began and ended at home. The poor orphan was altogether neglected, and as it refused to be fed by me, I was about to return it to the place where I had found it, when, toward the afternoon, a Scarlet Tanager, no doubt its own parent, was seen fluttering around the cage, endeavoring to get in. Finding he could not, he flew off, and soon returned with food in his bill, and continued to feed it until after sunset, taking up his lodgings on the higher branches of the same tree. In the morning, as soon as day broke, he was again seen most actively engaged in the same manner, and, notwithstanding the insolence of the Orioles, he continued his benevolent offices the whole day, roosting at night as before. On the third or fourth day he seemed extremely solicitous for the liberation of his charge, using every expression of distressful anxiety, and every call and invitation that nature had put in his power, for him to come out. This was too much for the feelings of my friend. He procured a ladder, and mounting to the spot where the bird was suspended, opened the cage, took out his prisoner, and restored him to liberty and to his parent, who, with notes of great exultation, accompanied his flight to the woods."

THE SCARLET TANAGER.

What could be more beautiful to see than this bird among the green leaves of a tree? It almost seems as though he would kindle the dry limb upon which he perches. This is his holiday dress. He wears it during the nesting season. After the young are reared and the summer months gone, he changes his coat. We then find him dressed in a dull yellowish green—the color of his mate the whole year.

Do you remember another bird family in which the father bird changes his dress each spring and autumn?

The Scarlet Tanager is a solitary bird. He likes the deep woods, and seeks the topmost branches. He likes, too, the thick evergreens. Here he sings through the summer days. We often pass him by for he is hidden by the green leaves above us.

He is sometimes called our "Bird of Paradise."

Tanagers feed upon winged insects, caterpillars, seeds, and berries. To get these they do not need to be on the ground. For this reason it is seldom we see them there.

Both birds work in building the nest, and both share in caring for the little ones. The nest is not a very pretty one—not pretty enough for so beautiful a bird, I think. It is woven so loosely that if you were standing under it, you could see light through it.

Notice his strong, short beak. Now turn to the picture of the Rose-Breasted Grosbeaks in April Birds. Do you see how much alike they are? They are near relatives.

I hope that you may all have a chance to see a Scarlet Tanager dressed in his richest scarlet and most jetty black.

THE RUFFED GROUSE.

THE Ruffed Grouse, which is called Partridge in New England and Pheasant in the Middle and Southern States, is the true Grouse, while Bob White is the real Partridge. It is unfortunate that they continue to be confounded. The fine picture of his grouseship, however, which we here present should go far to make clear the difference between them.

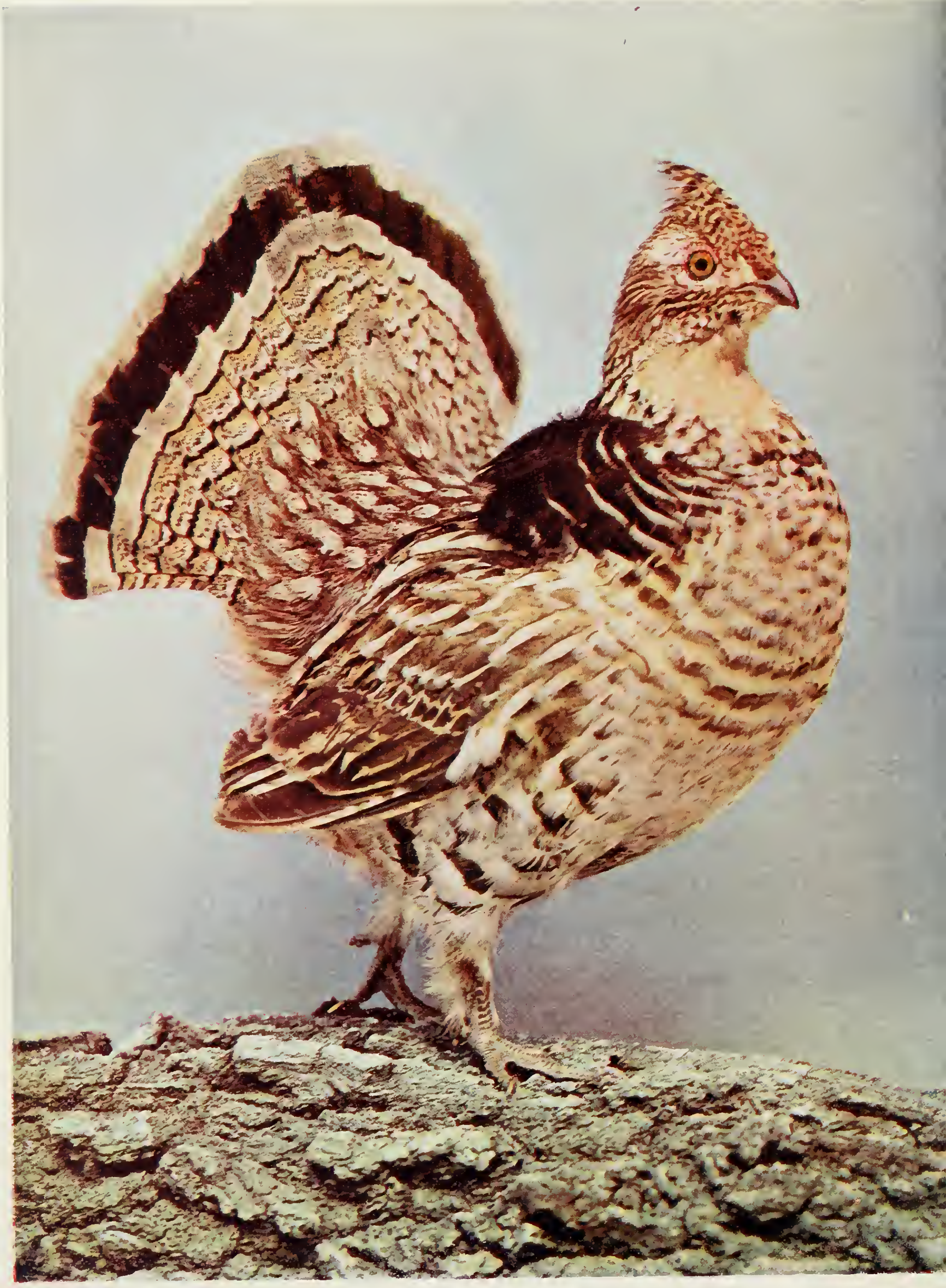
The range of the Ruffed Grouse is eastern United States, south to North Carolina, Georgia, Mississippi, and Arkansas. They hatch in April, the young immediately leaving the nest with the mother. When they hear the mother's warning note the little ones dive under leaves and bushes, while she leads the pursuer off in an opposite direction. Building the nest and sitting upon the eggs constitute the duties of the female, the males during this interesting season keeping separate, not rejoining their mates until the young are hatched, when they begin to roam as a family.

Like the Turkey, the Ruffed Grouse has a habit of pluming and strutting, and also makes the drumming noise which has caused so much discussion. This noise "is a hollow vibrating sound, beginning softly and increasing as if a small rubber ball were dropped slowly and then rapidly bounced on a drum." While drumming the bird contrives to make himself invisible, and if seen it is difficult to get the slightest clue to the manner in which the sound is produced. And observers say that it beats with its wings on a log, that it raises its wings and strikes their edges above its back, that it claps them against its sides like a crowing rooster, and that it beats the air. The writer has seen a grouse drum, appearing to strike its wings together over its back. But there is much difference of opinion on the subject, and young observers may settle the question for themselves. When preparing to drum he seems fidgety and nervous and his sides are inflated. Letting his wings droop, he flaps them so fast that they make one continuous humming sound. In this peculiar way he calls his mate, and while he is still drumming, the hen bird may appear, coming slyly from the leaves.

The nest is on the ground, made by the female of dry leaves and a few feathers plucked from her own breast. In this slight structure she lays ten or twelve cream-colored eggs, specked with brown.

The eyes of the Grouse are of great depth and softness, with deep expanding pupils and golden brown iris.

Coming suddenly upon a young brood squatted with their mother near a roadside in the woods, an observer first knew of their presence by the old bird flying directly in his face, and then tumbling about at his feet with frantic signs of distress and lameness. In the meantime the little ones scattered in every direction and were not to be found. As soon as the parent was satisfied of their safety, she flew a short distance and he soon heard her clucking call to them to come to her again. It was surprising how quickly they reached her side, seeming to pop up as from holes in the ground.



From col. F. M Woodruff.

RUFFED GROUSE.

THE RUFFED GROUSE.

At first sight most of you will think this is a turkey. Well, it does look very much like one. He spreads his tail feathers, puffs himself up, and struts about like a turkey. You know by this time what his name is and I think you can easily see why he is called Ruffed.

This proud bird and his mate live with us during the whole year. They are found usually in grassy lands and in woods.

Here they build their rude nest of dried grass, weeds and the like. You will generally find it at the foot of a tree, or along side of an old stump in or near swampy lands.

The Ruffed Grouse has a queer way of calling his mate. He stands on a log or stump, puffed up like a turkey—just as you see him in the picture. Then he struts about for a time just as you have seen a turkey gobbler do. Soon he begins to work his wings—slowly at first, but faster and faster, until it sounds like the beating of a drum.

His mate usually answers his call by coming. They set up housekeeping and build their rude nest which holds from eight to fourteen eggs. As soon as the young are hatched they can run about and find their own food. So you see they are not much bother to their parents. When they are a week old they can fly. The young usually stay with their parents until next Spring. Then they start out and find mates for themselves.

I said at the first that the Ruffed Grouse stay with us all the year. In the winter, when it is very cold, they burrow into a snowdrift to pass the night. During the summer they always roost all night.

THE BLACK AND WHITE CREEPING WARBLER.

THIS sprightly little bird is met with in various sections of the country. It occurs in all parts of New England and New York, and has been found in the interior as far north as Fort Simpson. It is common in the Bahamas and most of the West India Islands, generally as a migrant; in Texas, in the Indian Territory, in Mexico, and throughout eastern America.

Dr. Coues states that this warbler is a very common summer resident near Washington, the greater number going farther north to breed. They arrive there during the first week in April and are exceedingly numerous until May.

In its habits this bird seems to be more of a creeper than a Warbler. It is an expert and nimble climber, and rarely, if ever, perches on the branch of a tree or shrub. In the manner of the smaller Woodpecker, the Creepers, Nuthatches, and Titmice, it moves rapidly around the trunks and larger limbs of the trees of the forest in search of small insects and their larvae. It is graceful and rapid in movement, and is often so intent upon its hunt as to be unmindful of the near presence of man.

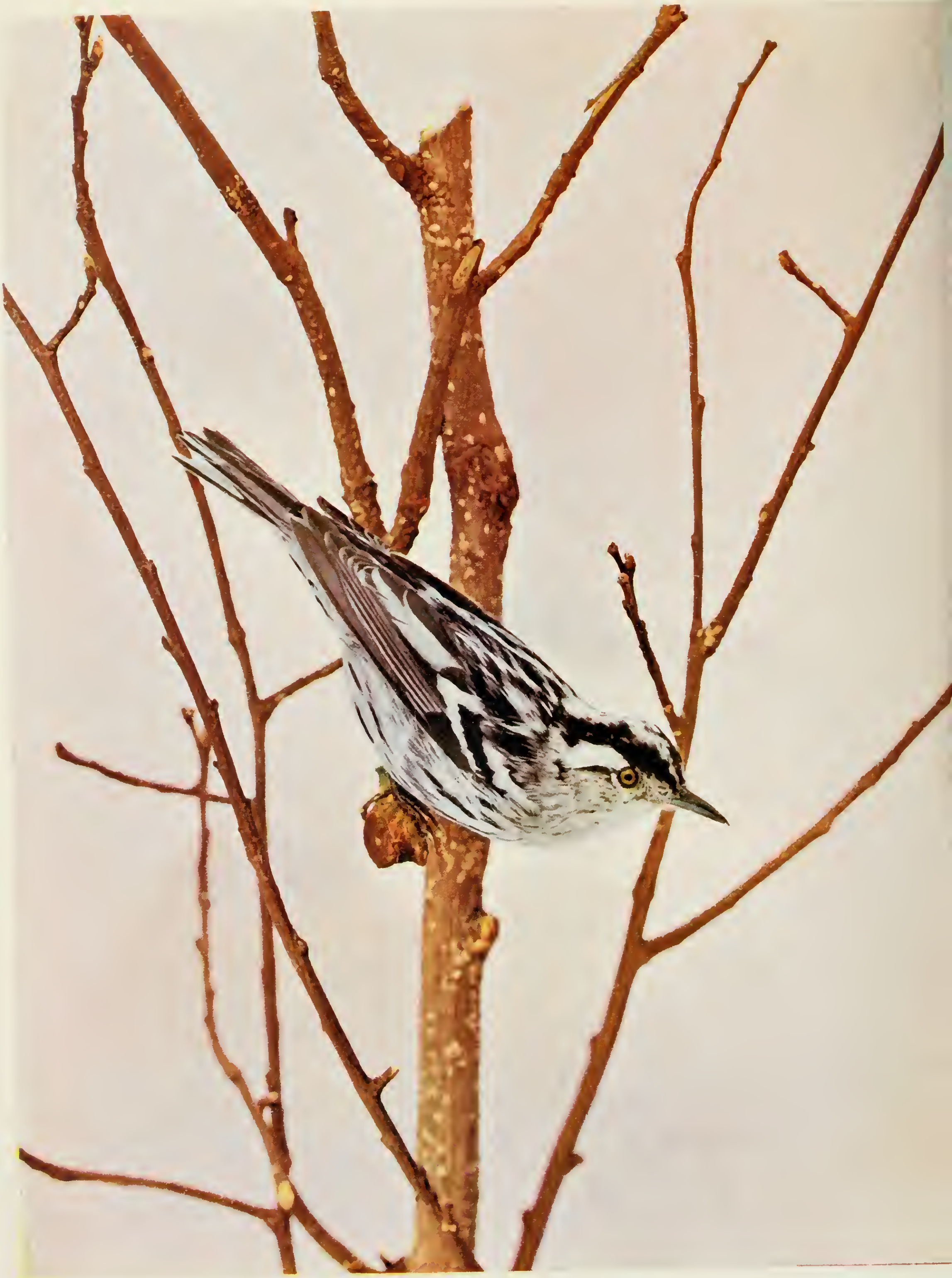
It is found chiefly in thickets, where its food is most easily obtained, and has been known to breed in the immediate vicinity of a dwelling.

The song of this Warbler is sweet and pleasing. It begins to sing from its first appearance in May and continues to repeat its brief refrain at intervals almost until its departure in August and September. At first it is a monotonous ditty, says Nuttall, uttered in a strong but shrill and filing tone. These notes, as the season advances, become more mellow and warbling.

The Warbler's movements in search of food are very interesting to the observer. Keeping the feet together they move in a succession of short, rapid hops up the trunks of trees and along the limbs, passing again to the bottom by longer flights than in the ascent. They make but short flight from tree to tree, but are capable of flying far when they choose.

They build on the ground. One nest containing young about a week old was found on the surface of shelving rock. It was made of coarse strips of bark, soft decayed leaves, and dry grasses, and lined with a thin layer of black hair. The parents fed their young in the presence of the observer with affectionate attention, and showed no uneasiness, creeping head downward about the trunks of the neighboring trees, and carrying large smooth caterpillars to their young.

They search the crevices in the bark of the tree trunks and branches, look among the undergrowth, and hunting along the fences for bunches of eggs, the buried larvae of the insects, which when undisturbed, hatch out millions of creeping, crawling, and flying things that devastate garden and orchard and every crop of the field.



From col. Chi. Acad. Sciences.

BLACK AND WHITE CREEPING WARBLER.

CHICAGO COLORTYPE C

BIRDS.

ILLUSTRATED BY COLOR PHOTOGRAPHY.

VOL. II. JULY, 1897. NO. 1.

BIRD SONG.

IT SHOULD not be overlooked by the young observer that if he would learn to recognize at once any particular bird, he should make himself acquainted with the song and call notes of every bird around him. The identification, however, of the many feathered creatures with which we meet in our rambles has heretofore required so much patience, that, though a delight to the enthusiast, few have time to acquire any great intimacy with them. To get this acquaintance with the birds, the observer has need to be prepared to explore perilous places, to climb lofty trees, and to meet with frequent mishaps. To be sure if every veritable secret of their habits is to be pried into, this pursuit will continue to be plied as patiently as it has ever been. The opportunity, however, to secure a satisfactory knowledge of bird song and bird life by a most delightful method has at last come to every one.

A gentleman who has taken a great interest in BIRDS from the appearance of the first number, but whose acquaintance with living birds is quite limited, visited one of our parks a few days ago, taking with him the latest number of the magazine. His object, he said, was to find there as many of the living forms of the specimens represented as he could. "Seating myself amidst a small grove of trees, what was my delight at seeing a Red Wing alight on a telegraph wire stretching across the park. Examining the picture in BIRDS I was somewhat disappointed to find that the live specimen was not so brilliantly marked as in the picture. Presently, however, another Blackbird alighted near, who seemed to be the veritable presentment of the photograph. Then it occured to me that I had seen the Red Wing before, without knowing its name. It kept repeating a rich, juicy note, *oncher-la-ree-e!* its tail tetering at quick intervals. A few days later I observed a large number of Red Wings near the Hyde Park water works, in the vicinity of which, among the trees and in the marshes, I also saw many other birds unknown to me. With BIRDS in my hands, I identified the Robin, who ran along the ground quite close to me, anon summoning with his beak the incautious angle worm to the surface. The Jays were noisy and numerous, and I observed many new traits in the Wood Thrush, so like the Robin that I was at first in some doubt about it. I heard very few birds sing that day, most of them being busy in search of food for their young."

[CONTINUED ON PAGE 17.]

x59.29.1 H (73)
Haliaetus

THE BALD-HEADED EAGLE.

Dear Boys and Girls :

I had hoped to show you the picture of the eagle that went through the war with the soldiers. They called him "Old Abe." You will find on page 35 a long story written about him. Ask some one to read it to you.

I could not get "Old Abe," or you should now be looking at his picture. He is at present in Wisconsin, and his owner would not allow him to be taken from home.

I did the next best thing, and found one that was very much like him. They are as near alike as two children of a family. Old Abe's feathers are not quite so smooth, though. Do you wonder, after having been through the war? He is a veteran, isn't he?

The picture is that of a Bald-headed Eagle. He is known, also, by other names, such as White-headed Eagle, Bird of Washington, Sea Eagle.

You can easily see by the picture that he is not bald-headed. The name White-headed would seem a better name. It is because at a distance his head and neck appear as though they were covered with a white skin.

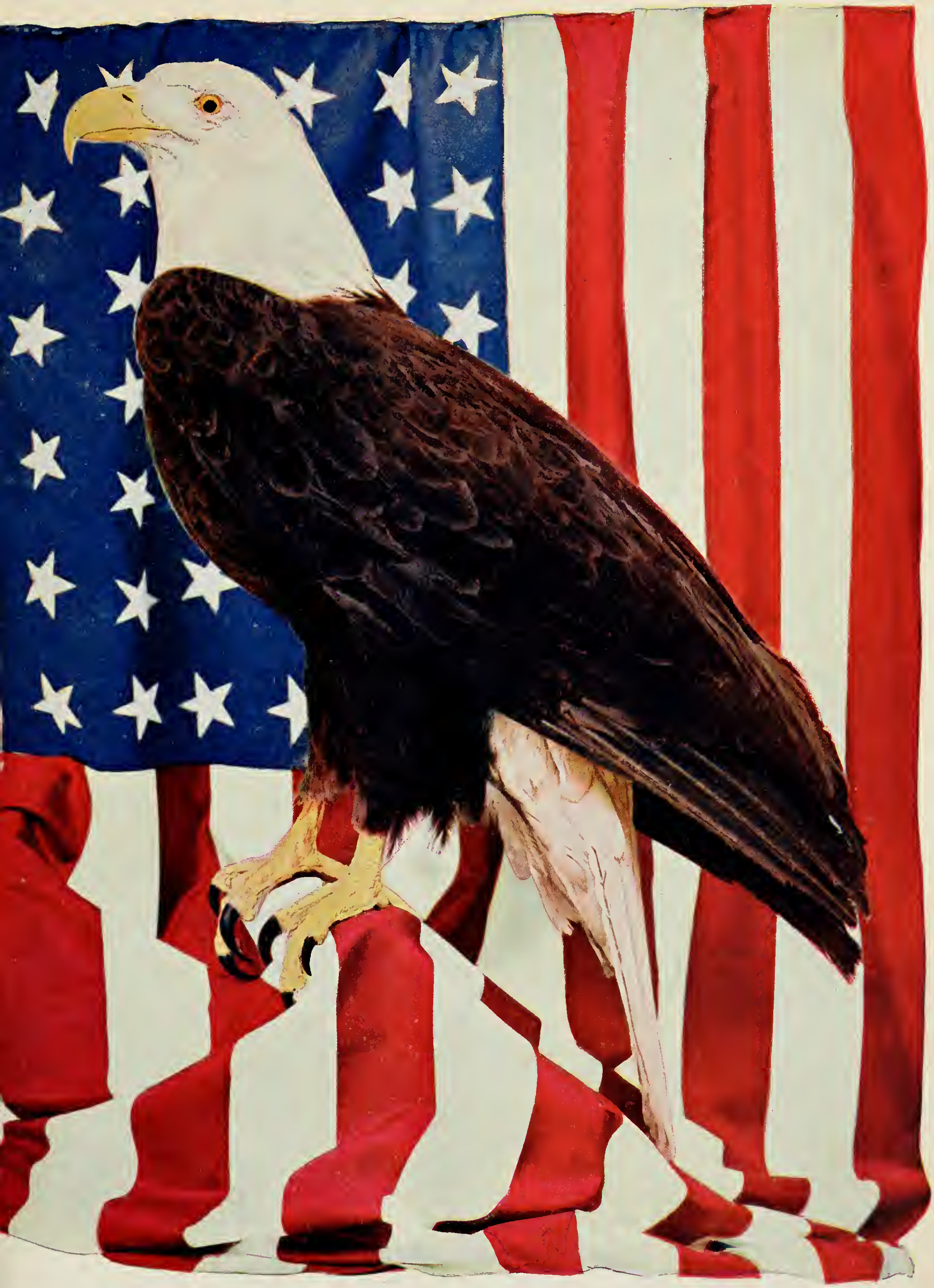
He is called "Sea Eagle" because his food is mostly fish. He takes the fish that are thrown upon the shores by the waves, and sometimes he robs the Fish Hawk of his food.

This mighty bird usually places his large nest in some tall tree. He uses sticks three to five feet long, large pieces of sod, weeds, moss, and whatever he can find.

The nest is sometimes five or six feet through. Eagles use the same nest for years, adding to it each year.

Young eagles are queer looking birds. When hatched, they are covered with a soft down that looks like cotton.

Their parents feed them, and do not allow them to leave the nest until they are old enough to fly. When they are old enough, the mother bird pushes them out of the nest. She must be sure that they can fly, or she would not dare do this. Don't you think so?



rom col. Chi. Acad. Sciences.

AMERICAN BALD EAGLE.
¼ Life size.

THE BALD HEADED EAGLE.

THIS mighty bird of lofty flight is a native of the whole of North America, and may be seen haunting the greater portions of the sea coasts, as well as the mouths of large rivers. He is sometimes called the Whiteheaded Eagle, the American Sea Eagle, the Bird of Washington, the Washington Eagle, and the Sea Eagle. On account of the snowy white of his head and neck, the name Bald Eagle has been applied to him more generally than any other.

Sea-faring men are partial to young Eagles as pets, there being a well established superstition among them that the ship that carries the "King of Birds" can never go down. The old Romans, in selecting the Eagle as an emblem for their imperial standard, showed this superstitious belief, regarding him as the favorite messenger of Jupiter, holding communion with heaven. The Orientals, too, believed that the feathers of the Eagle's tail rendered their arrows invincible. The Indian mountain tribes east of Tennessee venerated the Eagle as their bird of war, and placed a high value on his feathers, which they used for headdresses and to decorate their pipes of peace.

The United States seems to have an abiding faith in the great bird, as our minted dollars show.

The nest of the Bald Eagle is usually placed upon the top of a giant tree, standing far up on the side of a mountain, among myriads of twining vines, or on the summit of a high inaccessible rock. The nest in the course of years, becomes of great size as the Eagle lays her eggs year after year in the same nest, and at each nesting season adds new material to the old nest. It is strongly and comfortably built with large sticks and branches, nearly flat, and bound together with twining vines. The spacious interior is lined with hair and moss, so minutely woven together as to exclude the wind. The female lays two eggs of a brownish red color, with many dots and spots, the long end of the egg tapering to a point. The parents are affectionate, attend to their young as long as they are helpless and unfledged, and will not forsake them even though the tree on which they rest be enveloped in flames. When the Eaglets are ready to fly, however, the parents push them from the perch and trust them to the high atmospheric currents. They turn them out, so to speak, to shift for themselves.

The Bald Eagle has an accommodating appetite, eating almost anything that has ever had life. He is fond of fish, without being a great fisher, preferring to rob the Fish-hawk of the fruits of his skillful labor. Sitting upon the side of a mountain his keen vision surveys the plain or valley, and detects a sheep, a young goat, a fat turkey or rooster, a pig, a rabbit or a large bird, and almost within an eye-twinkle he descends upon his victim. A mighty grasp, a twist of his talons, and the quarry is dead long before the Eagle lays it down for a repast. The impetuosity and skill with which he pursues, overtakes and robs the Fish-hawk, and the swiftness with which the Bald Eagle darts down upon and seizes the booty, which the Hawk has been compelled to let go, is not the least wonderful part of this striking performance.

The longevity of the Eagle is very great, from 80 to 160 years.

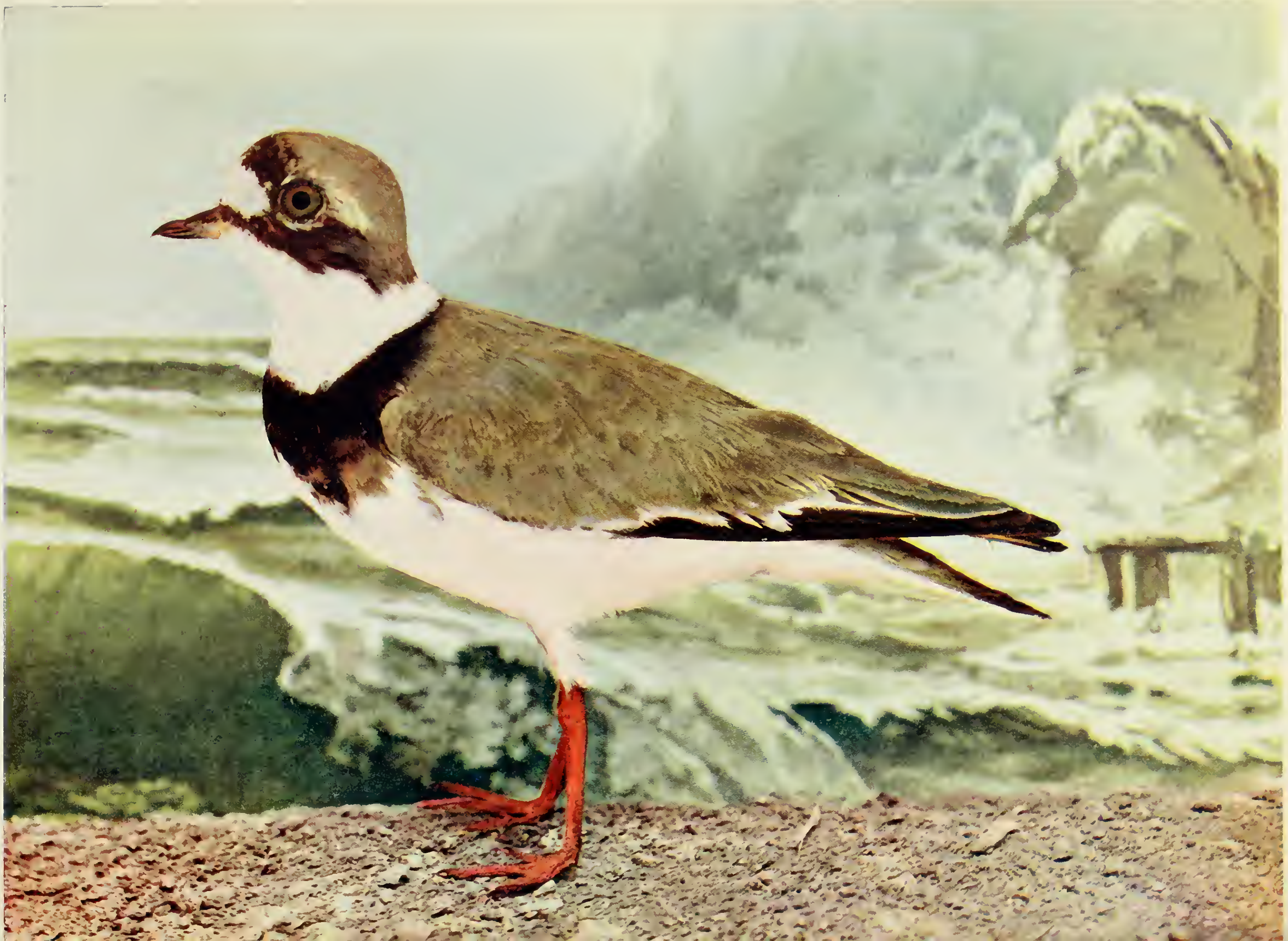
THE SEMIPALMATED RING PLOVER.

IN THEIR habits the Plovers are usually active; they run and fly with equal facility, and though they rarely attempt to swim, are not altogether unsuccessful in that particular.

The Semipalmated Ring Plover utters a plaintive whistle, and during the nesting season can produce a few connected pleasing notes. The three or four pear-shaped, variagated eggs are deposited in a slight hollow in the ground, in which a few blades of grass are occasionally placed. Both parents assist in rearing the young. Worms, small quadrupeds, and insects constitute their food. Their flesh is regarded as a delicacy, and they are therefore objects of great attraction to the sportsman, although they often render themselves extremely troublesome by uttering their shrill cry and thus warning their feathered companions of the approach of danger. From this habit they have received the name of "tell-tales." Dr. Livingstone said of the African species: "A most plaguey sort of public spirited individual follows you everywhere, flying overhead, and is most persevering in his attempts to give fair warning to all animals within hearing to flee from the approach of danger."

The American Ring Plover nests as far north as Labrador, and is common on our shores from August to October, after which it migrates southward. Some are stationary in the southern states. It is often called the Ring-Plover, and has been supposed to be identical with the European Ringed Plover.

It is one of the commonest of shore birds. It is found along the beaches and easily identified by the complete neck ring, white upon dark and dark upon light. Like the Sandpipers the Plovers dance along the shore in rhythm with the wavelets, leaving sharp half-webbed footprints on the wet sand. Though usually found along the seashore, Samuels says that on their arrival in spring, small flocks follow the courses of large rivers, like the Connecticut. He also found a single pair building on Muskeget, the famous haunt of Gulls, off the shore of Massachusetts. It has been found near Chicago, Illinois, in July.



THE RING PLOVER.

Plovers belong to a class of birds called Waders.

They spend the winters down south, and early in the spring begin their journey north. By the beginning of summer they are in the cold north, where they lay their eggs and hatch their young. Here they remain until about the month of August, when they begin to journey southward. It is on their way back that we see most of them.

While on their way north, they are in a hurry to reach their nesting places, so only stop here and there for food and rest.

Coming back with their families, we often see them in ploughed fields. Here they find insects and seeds to eat.

The Ring Plover is so called from the white ring around its neck.

These birds are not particular about their nests. They do not build comfortable nests as most birds do. They find a place that is sheltered from the north winds, and where the sun will reach them. Here they make a rude nest of the mosses lying around.

The eggs are somewhat pointed, and placed in the nest with the points toward the center. In this way the bird can more easily cover the eggs.

We find, among most birds, that after the nest is made, the mother bird thinks it her duty to hatch the young.

The father bird usually feeds her while she sits on the eggs. In some of the bird stories, you have read how the father and mother birds take turns in building the nest, sitting on the nest, and feeding the young.

Some father birds do all the work in building the nest, and take care of the birds when hatched.

Among plovers, the father bird usually hatches the young, and lets the wife do as she pleases.

After the young are hatched they help each other take care of them.

Plovers have long wings, and can fly very swiftly.

The distance between their summer and winter homes is sometimes very great.

THE MALLARD DUCK.

We should probably think this the most beautiful of ducks, were the Wood Duck not around.

His rich glossy-green head and neck, snowy white collar, and curly feathers of the tail are surely marks of beauty.

But Mr. Mallard is not so richly dressed all of the year. Like a great many other birds, he changes his clothes after the holiday season is over. When he does this, you can hardly tell him from his mate who wears a sober dress all the year.

Most birds that change their plumage wear their bright, beautiful dress during the summer. Not so with Mr. Mallard. He wears his holiday clothes during the winter. In the summer he looks much like his mate.

Usually the Mallard family have six to ten eggs in their nest. They are of a pale greenish color—very much like the eggs of our tame ducks that we see about the barnyards.

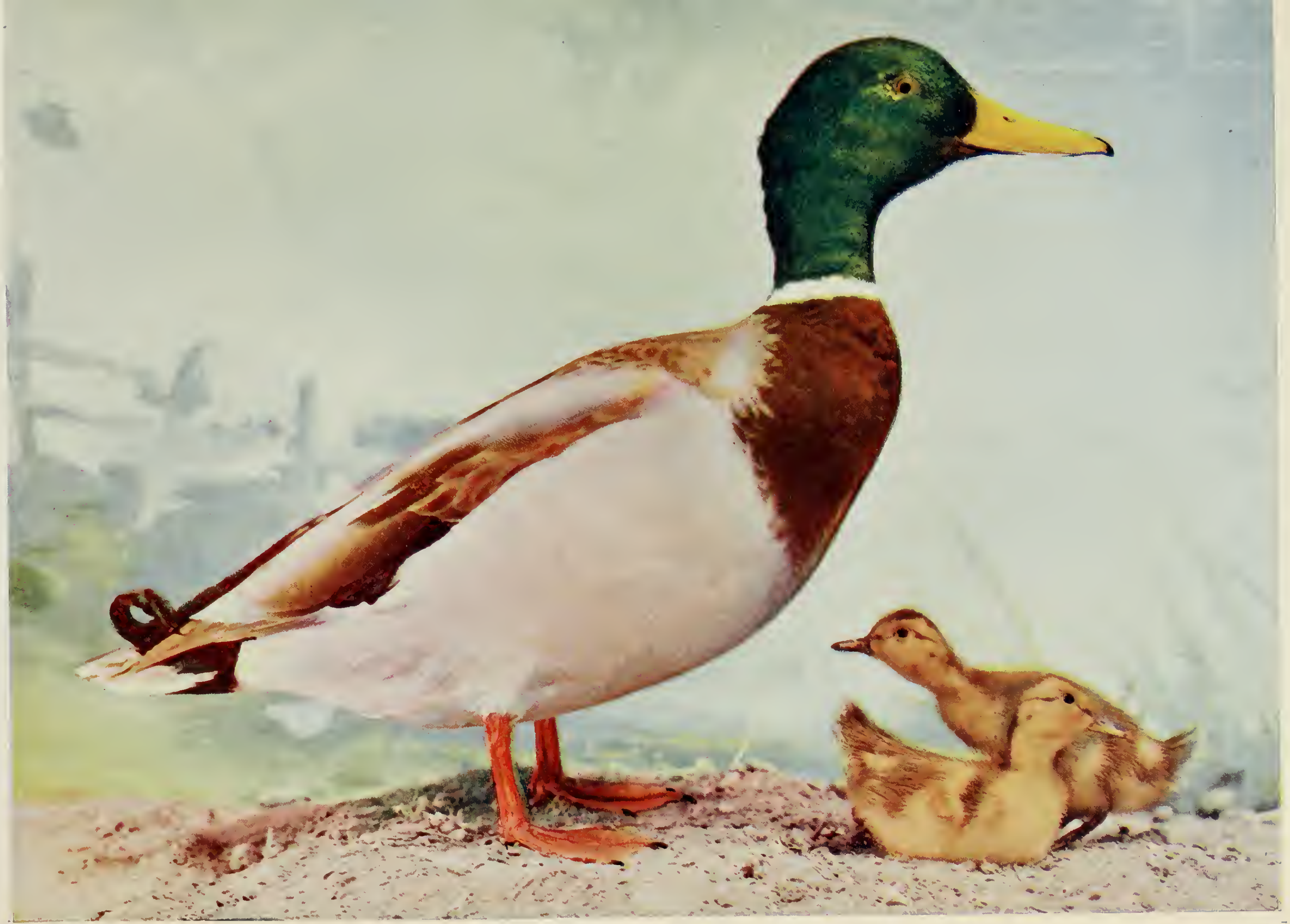
Those who have studied birds say that our tame ducks are descendants of the Mallards.

If you were to hear the Mallard's *quack*, you could not tell it from that of the domestic duck.

The Mallard usually makes her nest of grass, and lines it with down from her breast. You will almost always find it on the ground, near the water, and well sheltered by weeds and tall grasses.

It isn't often you see a duck with so small a family. It must be that some of the ducklings are away picking up food.

Do you think they look like young chickens?



From col. Chi. Acad. Sciences.

MALLARD DUCK.
⅔ Life size.

THE MALLARD DUCK.

THE Mallard Duck is generally distributed in North America, migrating south in winter to Panama, Cuba, and the Bahamas. In summer the full grown male resembles the female, being merely somewhat darker in color. The plumage is donned by degrees in early June, and in August the full rich winter dress is again resumed. The adult males in winter plumage vary chiefly in the extent and richness of the chestnut of the breast.

The Mallard is probably the best known of all our wild ducks, being very plentiful and remarkable on account of its size. Chiefly migrant, a few sometimes remain in the southern portion of Illinois, and a few pairs sometimes breed in the more secluded localities where they are free from disturbance. Its favorite resorts are margins of ponds and streams, pools and ditches. It is an easy walker, and can run with a good deal of speed, or dive if forced to do so, though it never dives for food It feeds on seeds of grasses, fibrous roots of plants, worms, shell fish, and insects. In feeding in shallow water the bird keeps the hind part of its body erect, while it searches the muddy bottom with its bill. When alarmed and made to fly, it utters a loud quack, the cry of the female being the louder. "It feeds silently, but after hunger is satisfied, it amuses itself with various jabberings, swims about, moves its head backward and forward, throws water over its back, shoots along the surface, half flying, half running, and seems quite playful. If alarmed, the Mallard springs up at once with a bound, rises obliquely to a considerable height, and flies off with great speed, the wings producing a whistling sound. The flight is made by repeated flaps, without sailing, and when in full flight its speed is hardly less than a hundred miles an hour."

Early in spring the male and female seek a nesting place, building on the ground, in marshes or among water plants, sometimes on higher ground, but never far from water. The nest is large and rudely made of sedges and coarse grasses, seldom lined with down or feathers. In rare instances it nests in trees, using the deserted nests of hawks, crows, or other large birds. Six or eight eggs of pale dull green are hatched, and the young are covered over with down. When the female leaves the nest she conceals the eggs with hay, down, or any convenient material. As soon as hatched the chicks follow the mother to the water, where she attends them devotedly, aids them in procuring food, and warns them of danger. While they are attempting to escape, she feigns lameness to attract to herself the attention of the enemy. The chicks are wonderfully active little fellows, dive quickly, and remain under water with only the bill above the surface.

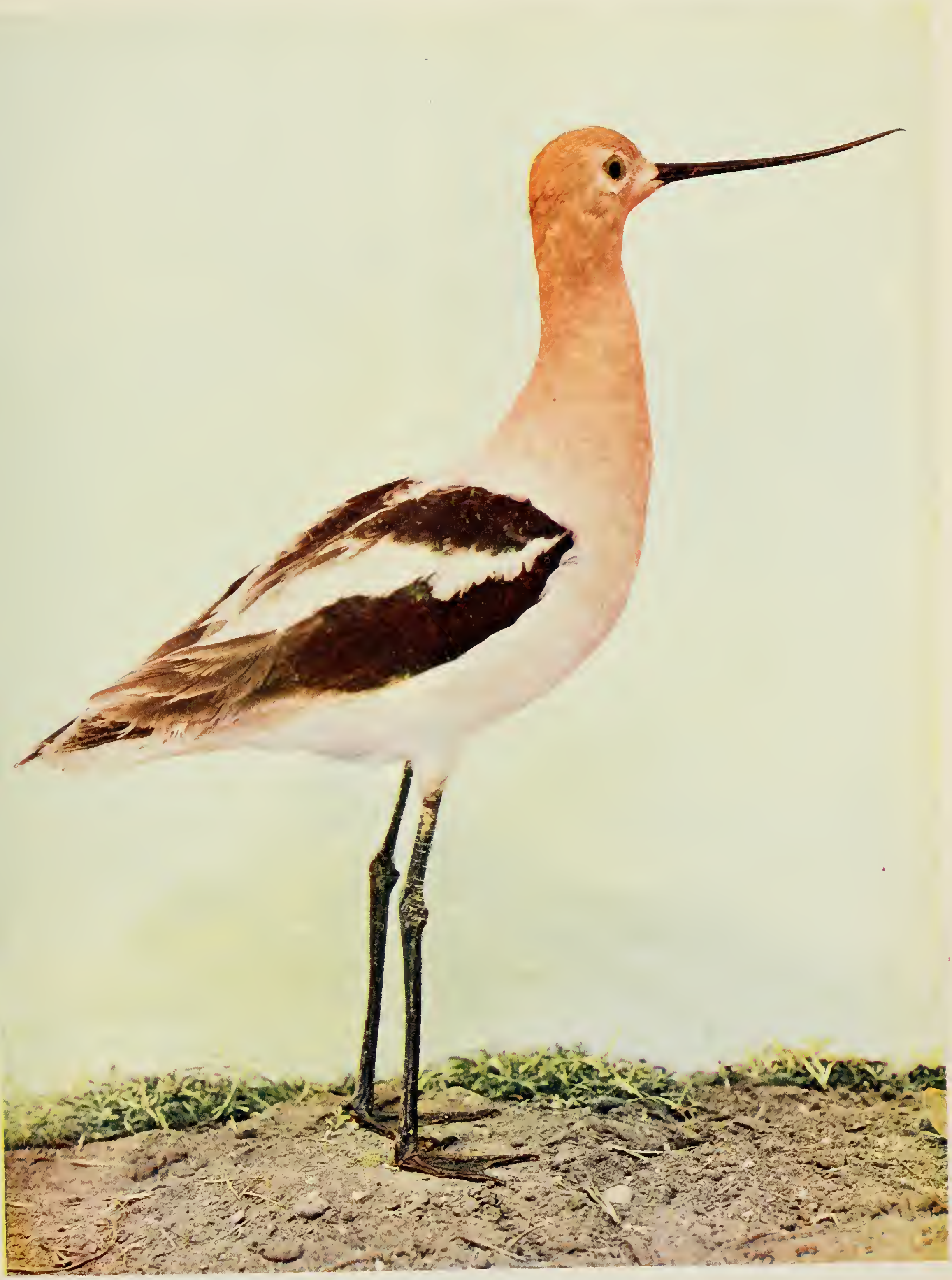
On a lovely morning, before the sun has fairly indicated his returning presence, there can be no finer sight than the hurrying pinions, or inspiring note than the squawk, oft repeated, of these handsome feathered creatures, as they seek their morning meal in the lagoons and marshes.

THE AMERICAN AVOCET.

WHITE SNIPE, Yelper, Lawyer, and Scooper are some of the popular names applied in various localities to this remarkably long-legged and long and slender-necked creature, which is to be found in temperate North America, and, in winter, as far south as Cuba and Jamaica. In north-eastern Illinois the Avocet generally occurs in small parties the last of April and the first of May, and during September and the early part of October, when it frequents the borders of marshy pools. The bird combines the characteristics of the Curlew and the Godwit, the bill being re-curved.

The cinnamon color on the head and neck of this bird varies with the individual; sometimes it is dusky gray around the eye, especially in the younger birds.

The Avocet is interesting and attractive in appearance, without having any especially notable characteristics. He comes and goes and is rarely seen by others than sportsmen.



From col. F. M. Woodruff.

AMERICAN AVOCET.
½ Life size.

BIRD SONG—Continued from page 1.

Many of our singing birds may be easily identified by any one who carries in his mind the images which are presented in our remarkable pictures. See the birds at home, as it were, and hear their songs.

Those who fancy that few native birds live in our parks will be surprised to read the following list of them now visible to the eyes of so careful an observer as Mr. J. Chester Lyman.

"About the 20th of May I walked one afternoon in Lincoln Park with a friend whose early study had made him familiar with birds generally, and we noted the following varieties:

1 Magnolia Warbler.
2 Yellow Warbler.
3 Black Poll Warbler.
4 Black-Throated Blue Warbler.
5 Black-Throated Queen Warbler.
6 Blackburnian Warbler.
7 Chestnut-sided Warbler.
8 Golden-crowned Thrush.
9 Wilson's Thrush.
10 Song Thrush.
11 Catbird.
12 Bluebird.
13 Kingbird.
14 Least Fly Catcher.
15 Wood Pewee Fly Catcher.
16 Great Crested Fly Catcher.
17 Red-eyed Vireo.
18 Chimney Swallow.
19 Barn Swallow.
20 Purple Martin.
21 Red Start.
22 House Wren.
23 Purple Grackle.
24 White-throated Sparrow.
25 Song Sparrow.
26 Robin.
27 Blue Jay.
28 Red Headed Woodpecker.
29 Kingfisher.
30 Night Hawk.
31 Yellow-Billed Cuckoo.
32 Scarlet Tanager, Male and Female.
33 Black and White Creeper.
34 Gull, or Wilson's Tern.
35 The Omni-present English Sparrow.

"On a similar walk, one week earlier, we saw about the same number of varieties, including, however, the Yellow Breasted Chat, and the Mourning, Bay Breasted, and Blue Yellow Backed Warblers."

The sweetest songsters are easily accessible, and all may enjoy their presence.

C. C. MARBLE.

[TO BE CONTINUED.]

THE CANVAS-BACK DUCK.

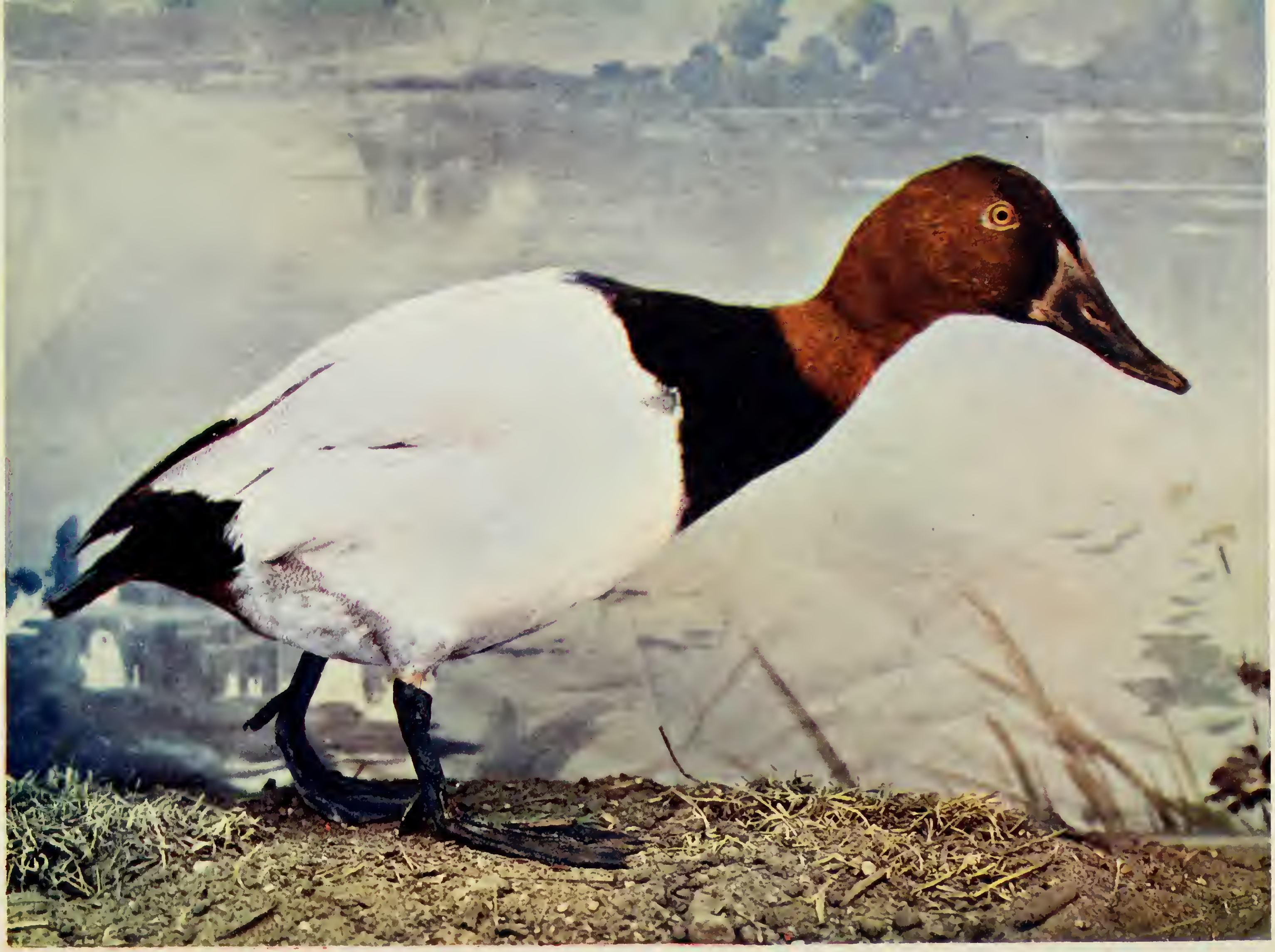
WHITE-BACK, Canard Cheval, (New Orleans,) Bull-Neck, and Red Headed Bull-Neck, are common names of the famous Canvas-Back, which nests from the northern states, northward to Alaska. Its range is throughout nearly all of North America, wintering from the Chesapeake southward to Guatemala.

"The biography of this duck," says Mabel Osgood Wright, "belongs rather to the cook-book than to a bird list," even its most learned biographers referring mainly to its "eatable qualities," Dr. Coues even taking away its character in that respect when he says "there is little reason for squealing in barbaric joy over this over-rated and generally under-done bird; not one person in ten thousand can tell it from any other duck on the table, and only then under the celery circumstances," referring to the particular flavor of its flesh, when at certain seasons it feeds on vallisneria, or "water celery," which won its fame. This is really not celery at all, but an eel-grass, not always found through the range of the Canvas-Back. When this is scarce it eats frogs, lizards, tadpoles, fish, etc., so that, says Mrs. Osgood, "a certificate of residence should be sold with every pair, to insure the inspiring flavor."

The opinion held as to the edible qualities of this species varies greatly in different parts of the country. No where has it so high a reputation as in the vicinity of Chesapeake Bay, where the alleged superiority of its flesh is ascribed to the abundance of "water celery." That this notion is erroneous is evident from the fact that the same plant grows in far more abundance in the upper Mississippi Valley, where also the Canvas-Back feeds on it. Hence it is highly probable that fashion and imagination, or perhaps a superior style of cooking and serving, play a very important part in the case. In California, however, where the "water celery" does not grow, the Canvas-Back is considered a very inferior bird for the table.

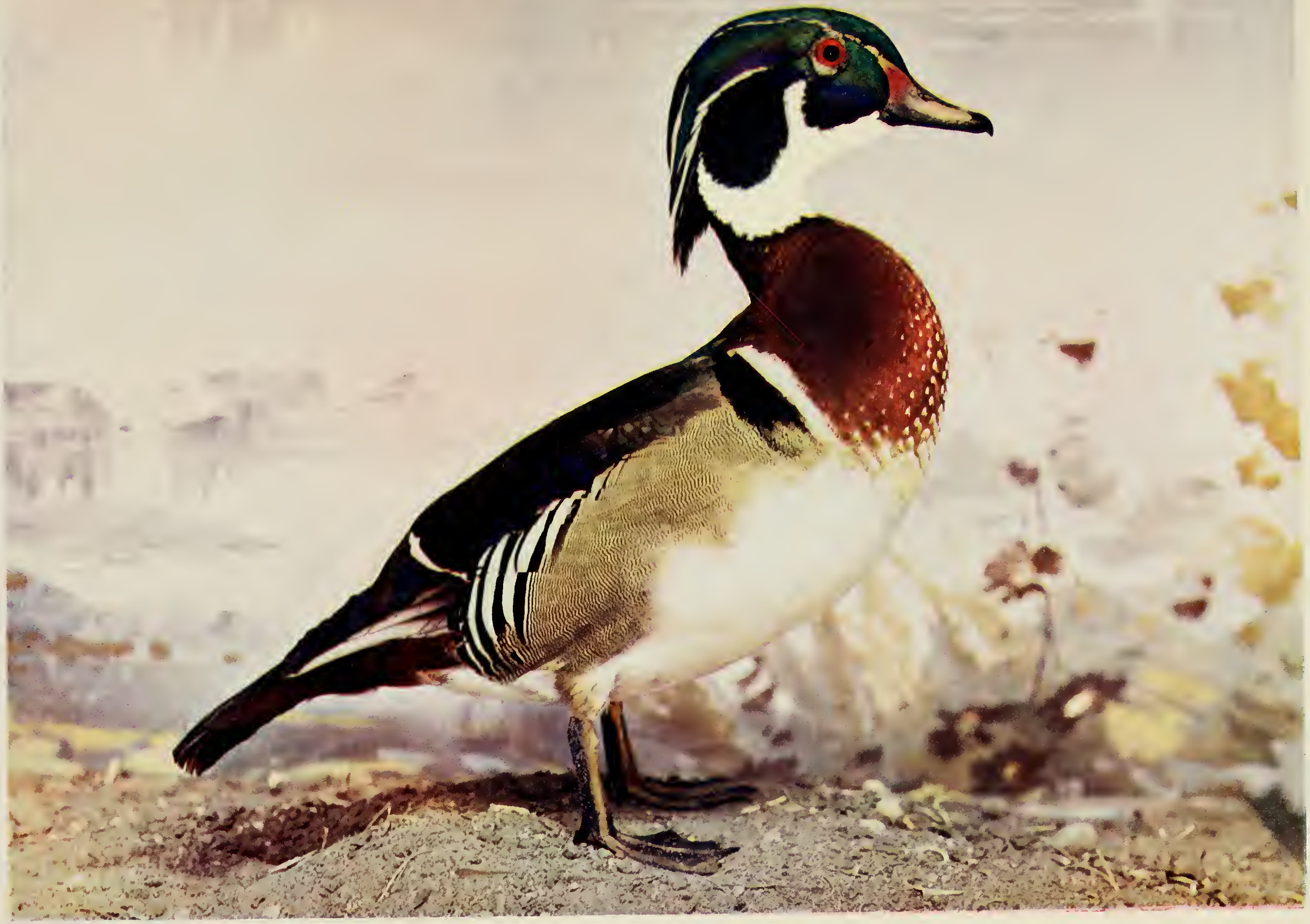
It has been hunted on Chesapeake Bay and its tributaries with such inconsiderate greed that its numbers have been greatly reduced, and many have been driven to more southern waters.

In and about Baltimore, the Canvas-Back, like the famous terrapin, is in as high favor for his culinary excellence, as are the women for beauty and hospitality. To gratify the healthy appetite of the human animal this bird was doubtless sent by a kind Providence, none the less mindful of the creature comforts and necessities of mankind than of the purely aesthetic senses.



From col. F. M. Woodruff.

CANVASBACK DUCK.



From col. F. M. Woodruff

WOOD DUCK.
½ Life size.

THE WOOD DUCK.

A great many people think that this is the most beautiful bird of North America. It is called Wood Duck because it usually makes its nest in the hollow of a tree that overhangs the water. If it can find a squirrel's or woodpecker's hole in some stump or tree, there it is sure to nest.

A gentleman who delighted in watching the Wood Duck, tells about one that built her nest in the hollow of a tree that hung over the water. He was anxious to see how the little ones, when hatched, would get down.

In a few days he knew that the ducklings were out, for he could hear their *pee, pee, pee.* They came to the edge of the nest, one by one, and tumbled out into the water.

You know a duck can swim as soon as it comes out of the egg.

Sometimes the nest is in the hollow of a tree that is a short distance from the water.

Now how do you suppose the ducklings get there as they do?

If the nest is not far from the ground, the mother bird lets them drop from it on the dried grass and leaves under the tree. She then carries them in her bill, one by one, to the water and back to the nest.

If the nest should be far from the ground, she carries them down one by one.

This same gentleman says that he once saw a Wood Duck carry down thirteen little ones in less than ten minutes. She took them in her bill by the back of the neck or the wing.

When they are a few days old she needs only to lead the way and the little ones will follow.

The Wood Duck is also called Summer Duck. This is because it does not stay with us during the winter, as most ducks do.

It goes south to spend the winter and comes back north early in the spring.

THE WOOD DUCK.

QUITE the most beautiful of the native Ducks, with a richness of plumage which gives it a bridal or festive appearance, this bird is specifically named *Spousa*, which means betrothed. It is also called Summer Duck, Bridal Duck, Wood Widgeon, Acorn Duck and Tree Duck.

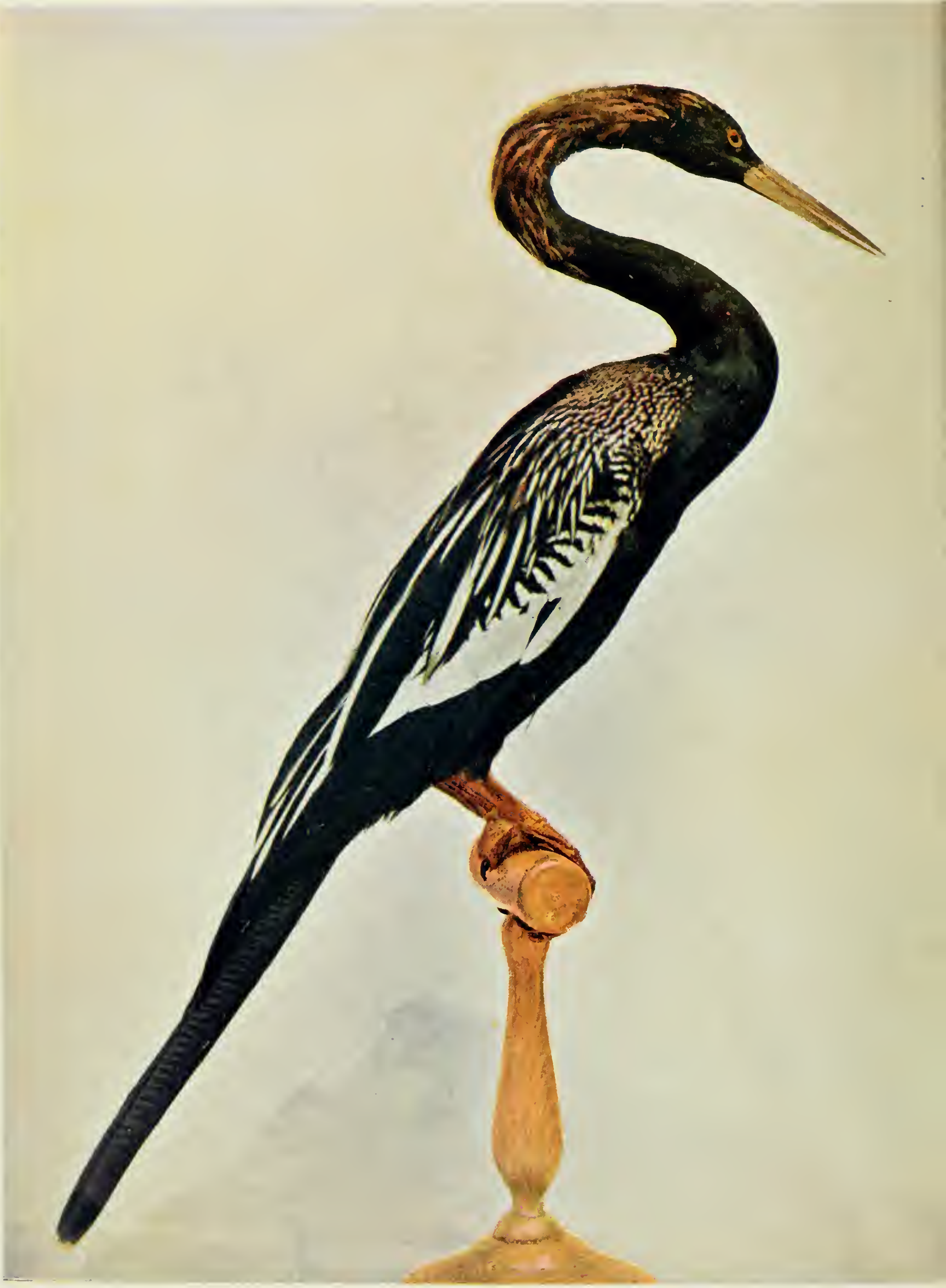
It is a fresh water foul, and exclusively so in the selection of its nesting haunts. It inhabits the whole of temperate North America, north to the fur countries, and is found in Cuba and sometimes in Europe. Its favorite haunts are wooded bottom-lands, where it frequents the streams and ponds, nesting in hollows of the largest trees. Sometimes a hole in a horizontal limb is chosen that seems too small to hold the Duck's plump body, and occasionally it makes use of the hole of an Owl or Woodpecker, the entrance to which has been enlarged by decay.

Wilson visited a tree containing a nest of a Wood or Summer Duck, on the banks of Tuckahoe river, New Jersey. The tree stood on a declivity twenty yards from the water, and in its hollow and broken top, about six feet down, on the soft decayed wood were thirteen eggs covered with down from the mother's breast. The eggs were of an exact oval shape, the surface smooth and fine grained, of a yellowish color resembling old polished ivory. This tree had been occupied by the same pair, during nesting time, for four successive years. The female had been seen to carry down from the nest thirteen young, one by one, in less than ten minutes. She caught them in her bill by the wing or back of the neck, landed them safely at the foot of the tree, and finally led them to the water. If the nest be directly over the water, the little birds as soon as hatched drop into the water, breaking their fall by extending their wings.

Many stories are told of their attachment to their nesting places. For several years one observer saw a pair of Wood Ducks make their nest in the hollow of a hickory which stood on the bank, half a dozen yards from a river. In preparing to dam the river near this point, in order to supply water to a neighboring city, the course of the river was diverted, leaving the old bed an eighth of a mile behind, notwithstanding which the ducks bred in the old place, the female undaunted by the distance which she would have to travel to lead her brood to the water.

While the females are laying, and afterwards when sitting, the male usually perches on an adjoining limb and keeps watch. The common note of the drake is *peet-peet*, and when standing sentinel, if apprehending danger, he makes a noise not unlike the crowing of a young cock, *oe-eek*. The drake does not assist in sitting on the eggs, and the female is left in the lurch in the same manner as the Partridge.

The Wood Duck has been repeatedly tamed and partially domesticated. It feeds freely on corn meal soaked in water, and as it grows, catches flies with great dexterity.



From col. F. C. Baker.

ANHINGA OR SNAKE BIRD.
⅓ Life size.

THE ANHINGA OR SNAKE BIRD.

THE Snake Bird is very singular indeed in appearance, and interesting as well in its habits. Tropical and sub-tropical America, north to the Carolinas and Southern Illinois, where it is a regular summer resident, are its known haunts. Here it is recognized by different names, as Water Turkey, Darter, and Snake Bird. The last mentioned seems to be the most appropriate name for it, as the shape of its head and neck at once suggest the serpent. In Florida it is called the Grecian Lady, at the mouth of the Mississipi, Water Crow, and in Louisiana, Bec a Lancette. It often swims with the body entirely under water, its head and long neck in sight like some species of water snakes, and has no doubt more than once left the impression on the mind of the superstitious sailor that he has seen a veritable sea serpent, the fear of which lead him to exaggerate the size of it.

This bird so strange in looks and action is common in summer in the South Atlantic and Gulf States, frequenting the almost impenetrable swamps, and is a constant resident of Florida.

As a diver the Snake Bird is the most wonderful of all the Ducks. Like the Loon it can disappear instantly and noislessly, swim a long distance and reappear almost in an opposite direction to that in which naturally it would be supposed to go. And the ease with which, when alarmed, it will drop from its perch and leave scarcely a ripple on the surface of the water, would appear incredible in so large a bird, were it not a well known fact. It has also the curious habit of sinking like a Grebe.

The nests of the Anhinga are located in various places, sometimes in low bushes at a height from the ground of only a few feet, or in the upper branches of high trees, but always over water. Though web footed, it is strong enough to grasp tightly the perch on which it nests. This gives it a great advantage over the common Duck which can nest only on the ground. Sometimes Snake Birds breed in colonies with various species of Herons. From three to five eggs, bluish, or dark greenish white, are usually found in the nest.

Prof. F. C. Baker, secretary of the Chicago Academy of Sciences, to whom we are indebted for the specimen presented here, captured this bird at Micco, Brevard Co., Florida, in April, 1889. He says he found a peculiar parasite in the brain of the Arhinga.

The Arhingas consist of but one species, which has a representative in the warmer parts of each of the great divisions of the earth. The number seen together varies from eight or ten to several hundred.

The hair-like feathers on the neck form a sort of loose mane.

When asleep the bird stands with its body almost erect. In rainy weather it often spends the greater part of the day in an erect attitude, with its neck and head stretched upward, remaining perfectly motionless, so that the water may glide off its plumage. The fluted tail is very thick and beautiful and serves as a propeller as well as a rudder in swimming.

THE AMERICAN WOODCOCK.

ISN'T this American Woodcock, or indeed any member of the family, a comical bird? His head is almost square, and what a remarkable eye he has! It is a seeing eye, too, for he does not require light to enable him to detect the food he seeks in the bogs. He has many names to characterize him, such as Bog-sucker, Mud Snipe, Blind Snipe. His greatest enemies are the pot hunters, who nevertheless have nothing but praise to bestow upon him, his flesh is so exquisitely palatable. Even those who deplore and deprecate the destruction of birds are not unappreciative of his good qualities in this respect.

The Woodcock inhabits eastern North America, the north British provinces, the Dakotas, Nebraska and Kansas, and breeds throughout the range.

Night is the time when the Woodcock enjoys life. He never flies voluntarily by day, but remains secluded in close and sheltered thickets till twilight, when he seeks his favorite feeding places. His sight is imperfect by day, but at night he readily secures his food, assisted doubtless by an extraordinary sense of smell. His remarkably large and handsome eye is too sensative for the glare of the sun, and during the greater part of the day he remains closely concealed in marshy thickets or in rank grass. In the morning and evening twilight and on moonlight nights, he seeks his food in open places. The early riser may find him with ease, but the first glow from the rays of the morning sun will cause his disappearance from the landscape.

He must be looked for in swamps, and in meadows with soft bottoms. During very wet seasons he seeks higher land—usually cornfields—and searches for food in the mellow plowed ground, where his presence is indicated by holes made by his bill. In seasons of excessive drought the Woodcock resorts in large numbers to tide water creeks and the banks of fresh water rivers. So averse is he to an excess of water, that after continued or very heavy rains he has been known suddenly to disappear from widely extended tracts of country.

A curious habit of the Woodcock, and one that is comparatively little known, is that of carrying its young in order to remove them from danger. So many trustworthy naturalists maintain this to be true that it must be accepted as characteristic of this interesting bird. She takes her young from place to place in her toe grasps as scarcity of food or safety may require.

As in the case of many birds whose colors adapt them to certain localities or conditions of existence, the patterns of the beautiful chestnut parts of the Woodcock mimic well the dead leaves and serve to protect the female and her young. The whistle made by their wings when flying is a manifestation of one of the intelligences of nature.

The male Woodcock, it is believed, when he gets his "intended" off entirely to himself, exhibits in peculiar dances and jigs that he is hers and hers only, or rises high on the wing cutting the most peculiar capers and gyrations in the air, protesting to her in the grass beneath the most earnest devotion, or advertising to her his whereabouts.

THE WOODCOCK.

Here is a bird that is not often seen in the daytime. During the day he stays in the deep woods or among the tall marsh grasses.

It is at twilight that you may see him. He then comes out in search of food.

Isn't he an odd-looking bird? His bill is made long so that he can bore into the soft ground for earthworms.

You notice his color is much like the Ruffed Grouse in June "BIRDS." This seems to be the color of a great many birds whose home is among the grasses and dried leaves. Maybe you can see a reason for this.

Those who have watched the woodcock carefully, say that he can move the tip end of the upper part of his bill. This acts like a finger in helping him to draw his food from the ground.

What a sight it must be to see a number of these queer looking birds at work getting their food. If they happen to be in a swampy place, they often find earthworms by simply turning over the dead leaves.

If there should be, near by, a field that has been newly plowed, they will gather in numbers, at twilight, and search for worms.

The Woodcock has short wings for his size. He seems to be able to fly very fast. You can imagine how he looks while flying—his long bill out in front and his legs hanging down.

THE AMERICAN SCOTER.

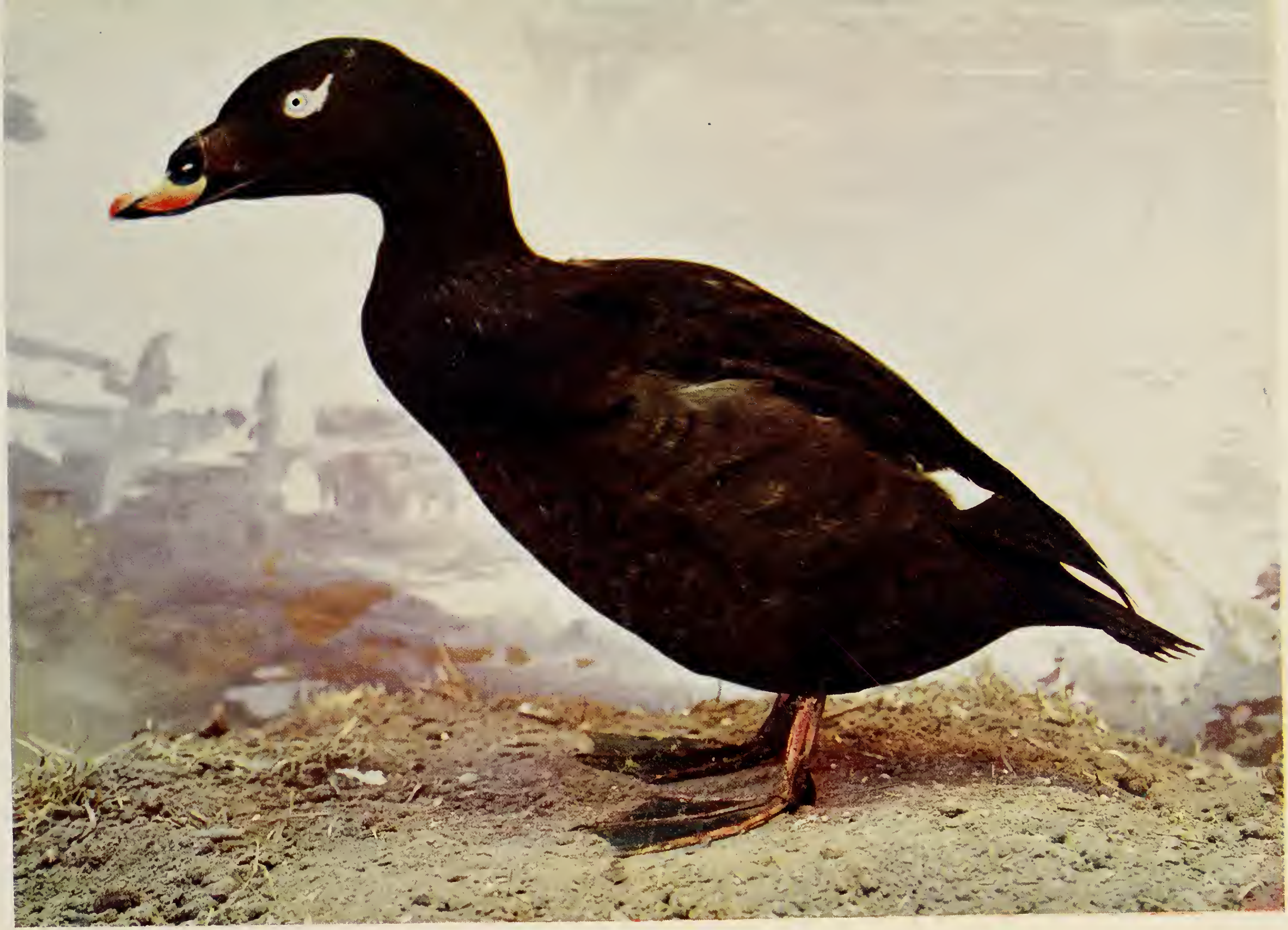
THE specimen we give of the American Scoter is one of unusual rarity and beauty of plumage. It was seen off the government pier, in Chicago, in November, 1895, and has been much admired.

The Scoter has as many names as characteristics, being called the Sea Coot, the Butter-billed, and the Hollow-billed Coot. The plumage of the full grown male is entirely black, while the female is a sooty brown, becoming paler below. She is also somewhat smaller.

This Duck is sometimes found in great numbers along the entire Atlantic coast where it feeds on small shell fish which it secures by diving. A few nest in Labrador, and in winter it is found in New Jersey, on the Great Lakes, and in California. The neighborhoods of marshes and ponds are its haunts, and in the Hudson Bay region the Scoter nests in June and July.

The nest is built on the ground near water. Coarse grass, feathers, and down are commonly used to make it comfortable, while it is well secreted in hollows in steep banks and cliffs. The eggs are from six to ten, of a dull buff color.

Prof. Cooke states that on May 2, 1883, fifty of these ducks were seen at Anna, Union county, Illinois, all busily engaged in picking up millet seed that had just been sown. If no mistake of identification was made in this case, the observation apparently reveals a new fact in the habits of the species, which has been supposed to feed exclusively in the water, and to subsist generally on fishes and other aquatic animal food.



From col. F. M. Woodruff.

WHITE-WINGED SCOTER.
$^{2}/_{5}$ Life size.

OLD ABE.

"I'd rather capture Old Abe," said Gen. Sterling Price, of the Confederate Army, "than a whole brigade."

"OLD ABE" was the live war Eagle which accompanied the Eighth Wisconsin regiment during the War of the Rebellion. Much of a more or less problematical character has been written about him, but what we regard as authentic we shall present in this article. Old Abe was a fine specimen of the Bald Eagle, very like the one figured in this number of BIRDS. Various stories are told of his capture, but the most trustworthy account is that Chief Sky, a Chippewa Indian, took him from the nest while an Eaglet. The nest was found on a pine tree in the Chippewa country, about three miles from the mouth of the Flambeau, near some rapids in the river. He and another Indian cut the tree down, and, amid the menaces of the parent birds, secured two young Eagles about the size of Prairie Hens. One of them died. The other, which lived to become historical, was sold to Daniel McCann for a bushel of corn. McCann carried it to Eau Claire, and presented it to a company then being organized as a part of the Eighth Wisconsin Infantry.

What more appropriate emblem than the American Bald Headed Bird could have been thus selected by the patriots who composed this regiment of freemen! The Golden Eagle (of which we shall hereafter present a splendid specimen,) with extended wings, was the ensign of the Persian monarchs, long before it was adopted by the Romans. And the Persians borrowed the symbol from the Assyrians. In fact, the symbolical use of the Eagle is of very remote antiquity. It was the insignia of Egypt, of the Etruscans, was the sacred bird of the Hindoos, and of the Greeks, who connected him with Zeus, their supreme deity. With the Scandinavians the Eagle is the bird of wisdom. The double-headed Eagle was in use among the Byzantine emperors, "to indicate their claims to the empire of both the east and the west." It was adopted in the 14th century by the German emperors. The arms of Prussia were distinguished by the Black Eagle, and those of Poland by the White. The great Napoleon adopted it as the emblem of Imperial France.

Old Abe was called by the soldiers the "new recruit from Chippewa," and sworn into the service of the United States by encircling his neck with red, white, and blue ribbons, and by placing on his breast a rosette of colors, after which he was carried by the regiment into every engagement in which it participated, perched upon a shield in the shape of a heart. A few inches above the shield was a grooved crosspiece for the Eagle to rest upon, on either end of which were three arrows. When in line Old Abe was always carried on the left of the color bearer, in the van of the regiment. The color bearer wore a belt to which was attached a socket for the end of the staff, which was about five feet in length. Thus the Eagle was high above the bearer's head, in plain sight of the column. A ring of leather was fastened to one of the Eagle's legs to which was connected a strong hemp cord about twenty feet long.

Old Abe was the hero of about twenty-five battles, and as many skirmishes. Remarkable as it may appear, not one bearer of the flag, or of the Eagle, always shining marks for the enemy's rifles, was ever shot down.

Once or twice Old Abe suffered the loss of a few feathers, but he was never wounded.

The great bird enjoyed the excitement of carnage. In battle he flapped his wings, his eyes blazed, and with piercing screams, which arose above the noise of the conflict, seemed to urge the company on to deeds of valor.

David McLane, who was the first color bearer to carry him into battle, said:

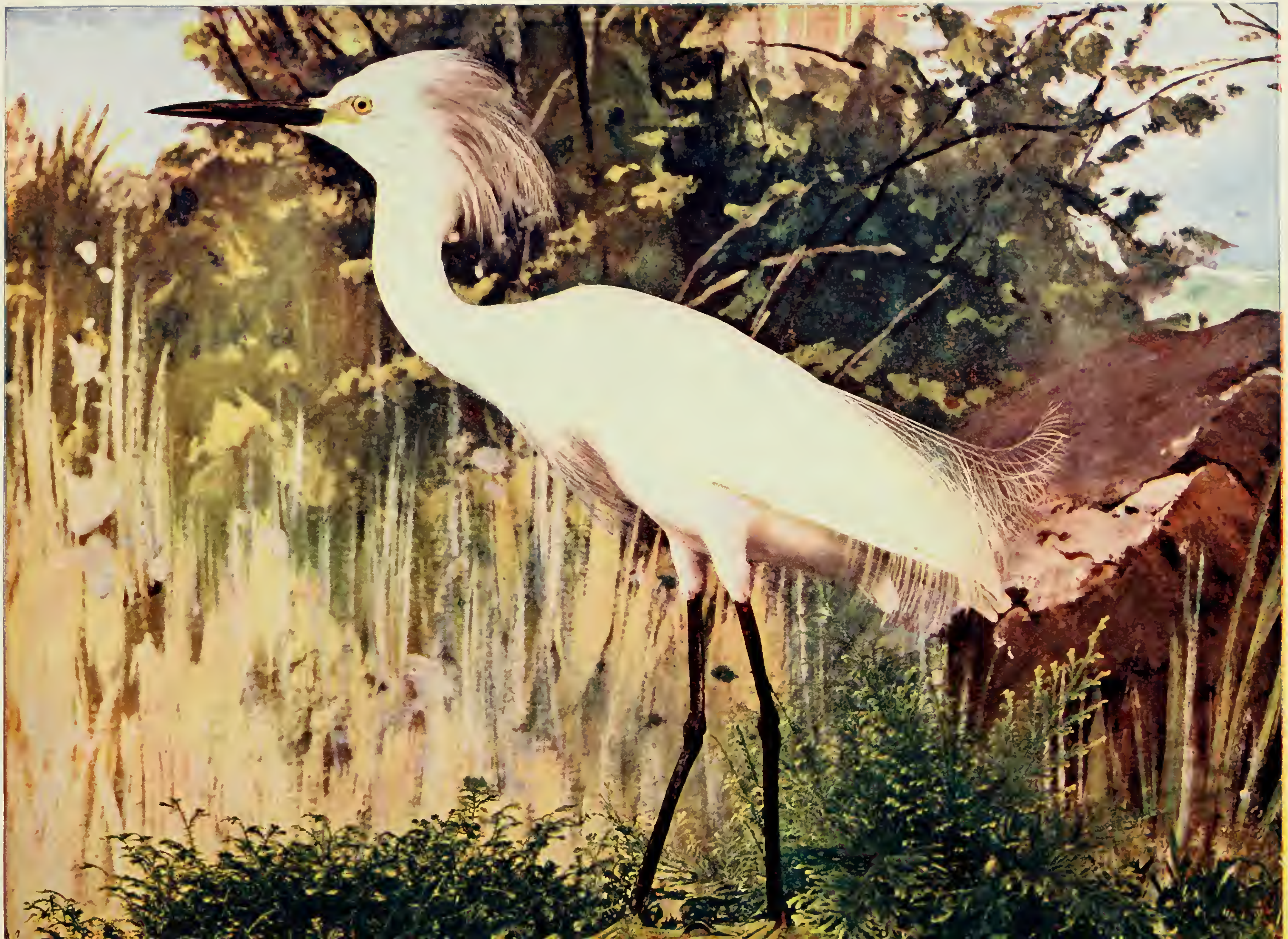
"Old Abe, like all old soldiers, seemed to dread the sound of musketry but with the roll of artillery he appeared to be in his glory. Then he screamed, spread his wings at every discharge, and reveled in the roar and smoke of the big guns." A correspondent who watched him closely said that when a battle had fairly begun Old Abe jumped up and down on his perch with such wild and fearful screams as an eagle alone can utter. The louder the battle, the fiercer and wilder were his screams.

Old Abe varied his voice in accord with his emotions. When surprised he whistled a wild melody of a melancholy softness; when hovering over his food he gave a spiteful chuckle; when pleased to see an old friend he seemed to say: "How do you do?" with a plaintive cooing. In battle his scream was wild and commanding, a succession of five or six notes with a startling trill that was inspiring to the soldiers. Strangers could not approach or touch him with safety, though members of the regiment who treated him with kindness were cordially recognized by him. Old Abe had his particular friends, as well as some whom he regarded as his enemies. There were men in the company whom he would not permit to approach him. He would fly at and tear them with his beak and talons. But he would never fight his bearer. He knew his own regiment from every other, would always accompany its cheer, and never that of any other regiment.

Old Abe more than once escaped, but was always lured by food to return. He never seemed disposed to depart to the blue empyrean, his ancestral home.

Having served three years, a portion of the members of Company C were mustered out, and Old Abe was presented to the state of Wisconsin. For many years, on occasions of public exercise or review, like other illustrious veterans, he excited in parade universal and enthusiastic attention.

He occupied pleasant quarters in the State Capitol at Madison, Wisconsin, until his death at an advanced age.



THE SNOWY HERON.

> "What does it cost this garniture of death?
> It costs the life which God alone can give;
> It costs dull silence where was music's breath,
> It costs dead joy, that foolish pride may live.
> Ah, life, and joy, and song, depend upon it,
> Are costly trimmings for a woman's bonnet!"
>
> —May Riley Smith.

TEMPERATE and tropical America, from Long Island to Oregon, south to Buenos Ayres, may be considered the home of the Snowy Heron, though it is sometimes seen on the Atlantic coast as far as Nova Scotia. It is supposed to be an occasional summer resident as far north as Long Island, and it is found along the entire gulf coast and the shores of both oceans. It is called the Little White Egret, and is no doubt the handsomest bird of the tribe. It is pure white, with a crest composed of many long hair like feathers, a like plume on the lower neck, and the same on the back, which are recurved when perfect.

Snowy Herons nest in colonies, preferring willow bushes in the marshes for this purpose. The nest is made in the latter part of April or early June. Along the gulf coast of Florida, they nest on the Mangrove Islands, and in the interior in the willow ponds and swamps, in company with the Louisiana and Little Blue Herons. The nest is simply a platform of sticks, and from two to five eggs are laid.

Alas, plume hunters have wrought such destruction to these lovely birds that very few are now found in the old nesting places. About 1889, according to Mr. F. M. Woodruff, this bird was almost completely exterminated in Florida, the plume hunters transferring their base of operation to the Texas coast of the Gulf, and the bird is now in a fair way to be utterly destroyed there also. He found them very rare in 1891 at Matagorda Bay, Texas. This particular specimen is a remarkably fine one, from the fact that it has fifty-two plumes, the ordinary number being from thirty to forty.

Nothing for some time has been more commonly seen than the delicate airy plumes which stand upright in ladies' bonnets. These little feathers, says a recent writer, were provided by nature as the nuptial adornment of the White Heron. Many kind-hearted women who would not on any account do a cruel act, are, by following this fashion, causing the continuance of a great cruelty. If ladies who are seemingly so indifferent to the inhumanity practiced by those who provide them with this means of adornment would apply to the Humane Education Committee, Providence, R. I., for information on the subject, they would themselves be aroused to the necessity of doing something towards the protection of our birds. Much is, however, being done by good men and women to this end.

The Little Egret moves through the air with a noble and rapid flight. It is curious to see it pass directly overhead. The head, body and legs are held in line, stiff and immovable, and the gently waving wings carry the bird along with a rapidity that seems the effect of magic.

An old name of this bird was Hern, or Hernshaw, from which was derived the saying, "He does not know a Hawk from a Hernshaw." The last word has been corrupted into "handsaw," rendering the proverb meaningless.

SUMMARY

Page 3.

BALD EAGLE.—*Haliæetus leucocephalus.* Other names: "White-headed Eagle," "Bird of Washington," "Gray Eagle," "Sea Eagle." Dark brown. Head, tail, and tail coverts white. Tarsus, naked. Young with little or no white.

Range—North America, breeding throughout its range.

Nest—Generally in tall trees.

Eggs—Two or three, dull white.

Page 8.

SEMI-PALMATED PLOVER.—*Ægialitis semi-palmata.* Other names: "American Ring Plover," "Ring Neck," "Beach Bird." Front, throat, ring around neck, and entire under parts white; band of deep black across the breast; upper parts ashy brown. Toes connected at base.

Range—North America in general, breeding in the Arctic and sub-arctic districts, winters from the Gulf States to Brazil.

Nest—Depression in the ground, with lining of dry grass.

Eggs—Three or four; buffy white, spotted with chocolate.

Page 11

MALLARD DUCK.—*Anas boschas.* Other names: "Green-head," "Wild Duck." Adult male, in fall, winter, and spring, beautifully colored; summer, resembles female—sombre.

Range—Northern parts of Northern Hemisphere.

Nest—Of grasses, on the ground, usually near the water.

Eggs—Six to ten; pale green or bluish white.

Page 15.

AMERICAN AVOCET. — *Recurvirostra americana.* Other names: "White Snipe," "Yelper," "Lawyer," "Scooper."

Range—Temperate North America.

Nest—A slight depression in the ground.

Eggs—Three or four; pale olive or buffy clay color, spotted with chocolate.

Page 20.

CANVAS-BACK. — *Aythya vallisneria.* Other names: "White-back," "Bull-neck," "Red-headed Bull-neck."

Range—North America. Breeds only in the interior, from northwestern states to the Arctic circle; south in winter to Guatemala.

Nest—On the ground, in marshy lakesides.

Eggs—Six to ten; buffy white, with bluish tinge.

Page 21.

WOOD DUCK.—*Aix sponsa.* Coloring, varied; most beautiful of ducks. Other names: "Summer Duck," "Bridal Duck," "Wood Widgeon," "Tree Duck."

Range — North America. Breeds from Florida to Hudson's Bay; winters south.

Nest—Made of grasses, usually placed in a hole in tree or stump.

Eggs—Eight to fourteen; pale, buffy white.

Page 26.

SNAKE BIRD.—*Anhinga anhinga.* Other names: "Water Turkey," "Darter," "Water Crow," "Grecian Lady."

Range—Tropical and sub-tropical America.

Nest—Of sticks, lined with moss, rootlets, etc., in a bush or tree over the water.

Eggs—Two to four; bluish white, with a chalky deposit.

Page 30.

AMERICAN WOODCOCK. — *Philohela minor.* Other names: "Bog-sucker," "Mud Snipe," "Blind Snipe."

Range—Eastern North America, breeding throughout its range.

Nest—Of dried leaves, on the ground.

Eggs—Four; buffy, spotted with shades of rufous.

Page 33.

WHITE-WINGED SCOTER. — *Oidemia deglandi.* Other names: "American Velvet Scoter," "White-winged Coot," "Uncle Sam Coot."

Range—Northern North America; breeding in Labrador and the fur countries; south in winter.

Nest—On the ground, beneath bushes.

Eggs—Six to ten; pale, dull buff.

Page 38.

SNOWY HERON.—*Ardea candidissima.* Other names: "Little Egret," "White-crested Egret," "White Poke."

Range—Tropical and temperate America.

Nest—A platform of sticks, in bushes, over water.

Eggs—Three to five; pale, dull blue.

BIRDS.

ILLUSTRATED BY COLOR PHOTOGRAPHY.

VOL. II. AUGUST. NO. 2.

BIRD SONG.

WE made several early morning excursions into the woods and fields during the month of June, and were abundantly rewarded in many ways—by beholding the gracious awakening of Nature in her various forms, kissed into renewed activity by the radiance of morn; by the sweet smelling air filled with the perfume of a multitude of opening flowers which had drunk again the dew of heaven; by the sight of flitting clouds across the bluest of skies, patching the green earth with moving shadows, and sweetest of all, by the twittering, calling, musical sounds of love and joy which came to the ear from the throats of the feathered throng. How pleasant to lie prone on one's back on the cool grass, and gaze upward through the shady green canopy of boughs, watching the pretty manoevers, the joyous greetings, the lively anxieties, the graceful movements, and even the sorrowful happenings of the bird-life above us.

Listen to the variety of their tones, as manifest as the difference of form and color. What more interesting than to observe their habits, and discover their cosy nests with their beautiful eggs in the green foliage? Strange that so many persons think only of making a collection of them, robbing the nests with heartless indifference to the suffering of the parents, to say nothing of the invasion which they make of the undoubted rights the birds have from nature to protection and perpetuation.

Strictly speaking, there are few birds to which the word "singing" can properly be applied, the majority of them not having more than two or three notes, and they with little suggestion of music in them. Chanticleer crows, his spouse cackles or clucks, as may be suitable to the occasion. To what ear are these noises musical? They are rather language, and, in fact, the varying notes of every species of bird have a significance which can alone be interpreted by its peculiar habits. If careful note be made of the immediate conduct of the male or female bird, as the case may be, after each call or sound, the meaning of it becomes plain.

A hen whose chicks are scattered in search of food, upon seeing a hawk, utters a note of warning which we have all heard, and the young scamper to her for protection beneath her wings. When she has laid an egg, *Cut-cut-cut-cut-ot-cut!* announces it from the nest in the barn. When the chicks are hatched, her *cluck*, *cluck*, *cluck*, calls them from the nest in the wide world, and her *chick*, *chick*, *chick*, uttered quickly, selects for them the dainty which she has found, or teaches them what is proper for their diet. A good listener will detect enough intonations in her voice to constitute a considerable vocabulary, which, if imitated

[CONTINUED ON PAGE 57.]

THE AMERICAN OSPREY.

Here is the picture of a remarkable bird. We know him better by the name Fish Hawk. He looks much like the Eagle in July "BIRDS." The Osprey has no use for Mr. Eagle though.

You know the Bald Eagle or Sea Eagle is very fond of fish. Well, he is not a very good fisherman and from his lofty perch he watches for the Fish Hawk or Osprey. Do you ask why? Well, when he sees a Fish Hawk with his prey, he is sure to chase him and take it from him. It is for this reason that Ospreys dislike the Bald Eagle.

Their food is fish, which as a rule they catch alive.

It must be interesting to watch the Osprey at his fishing. He wings his way slowly over the water, keeping a watch for fish as they appear near the surface.

When he sees one that suits him, he hovers a moment, and then, closing his wings. falls upon the fish.

Sometimes he strikes it with such force that he disappears in the water for a moment. Soon we see him rise from the water with the prey in his claws.

He then flies to some tall tree and if he has not been discovered by his enemy, the Eagle, can have a good meal for his hard work.

Look at his claws; then think of them striking a fish as they must when he plunges from on high.

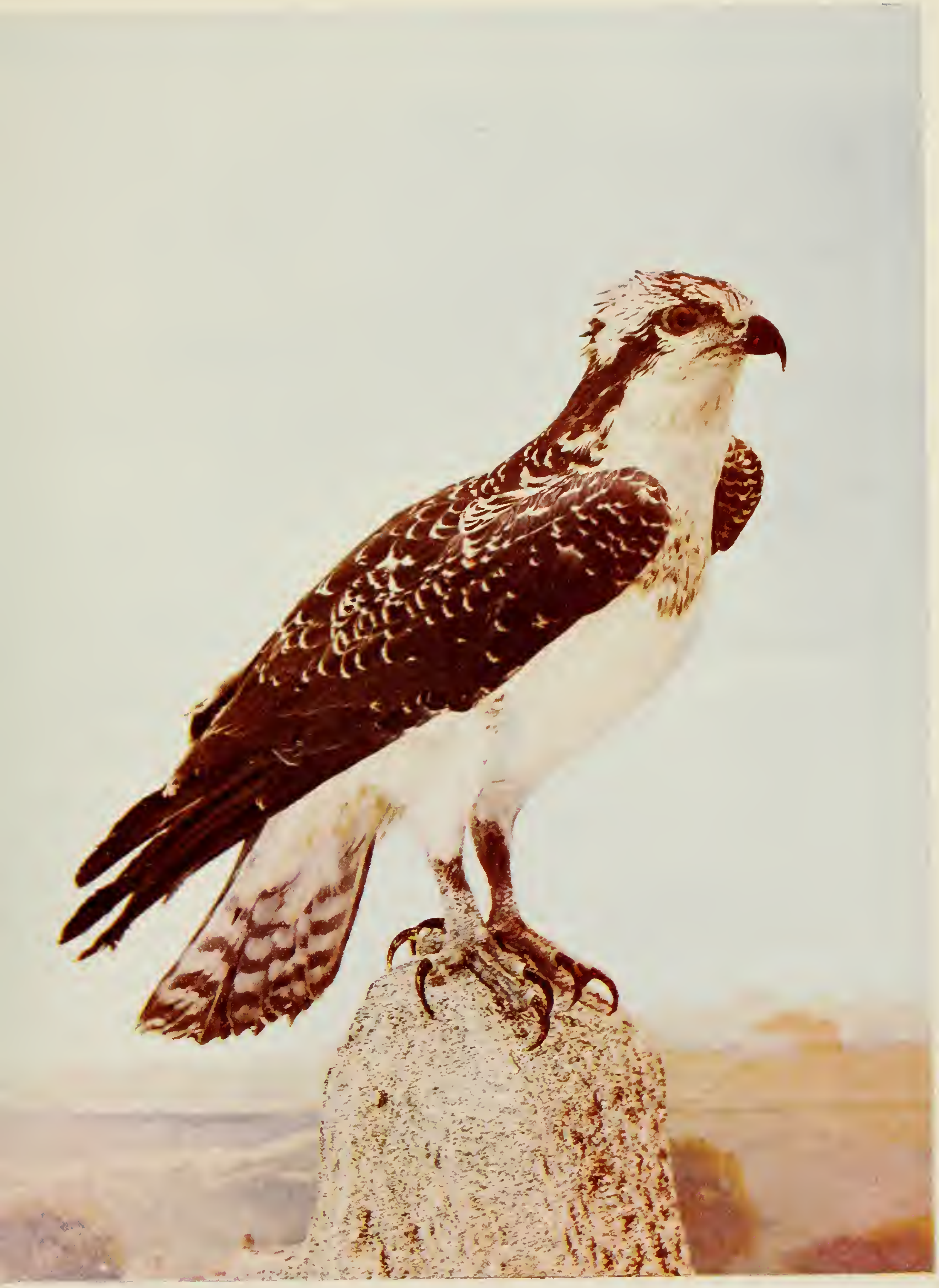
A gentleman tells of an Osprey that fastened his claws in a fish that was too large for him.

The fish drew him under and nothing more was seen of Mr. Osprey. The same gentleman tells of a fish weighing six pounds that fell from the claws of a Fish Hawk that became frightened by an Eagle.

The Osprey builds his nest much like the Bald Eagle. It is usually found in a tall tree and out of reach.

Like the Eagle, he uses the same nest each year, adding to it. Sometimes it measures five feet high and three feet across. One nest that was found, contained enough sticks, cornstalks, weeds, moss, and the like, to fill a cart, and made a load for a horse to draw. Like the Crows and Blackbirds they prefer to live together in numbers. Over three hundred nests have been found in the trees on a small island.

One thing I want you to remember about the Osprey. They usually remain mated for life.



om col. F. M. Woodruff.

OSPREY.
$\frac{1}{3}$ Life size.

THE AMERICAN OSPREY.

AN interesting bird, "Winged Fisher," as he has been happily called, is seen in places suited to his habits, throughout temperate North America, particularly about islands and along the seacoast. At Shelter Island, New York, they are exceedingly variable in the choice of a nesting place. On Gardiner's Island they all build in trees at a distance varying from ten to seventy-five feet from the ground; on Plum Island, where large numbers of them nest, many place their nests on the ground, some being built up to a height of four or five feet while others are simply a few sticks arranged in a circle, and the eggs laid on the bare sand. On Shelter Island they build on the chimneys of houses, and a pair had a nest on the cross-bar of a telegraph pole. Another pair had a nest on a large rock. These were made of coarse sticks and sea weed, anything handy, such as bones, old shoes, straw, etc. A curious nest was found some years ago on the coast of New Jersey. It contained three eggs, and securely imbedded in the loose material of the Osprey's nest was a nest of the Purple Grackle, containing five eggs, while at the bottom of the Hawk's nest was a thick, rotten limb, in which was a Tree Swallow's nest of seven eggs.

In the spring and early autumn this familiar eagle-like bird can be seen hovering over creek, river, and sound. It is recognized by its popular name of Fish-Hawk. Following a school of fish, it dashes from a considerable height to seize its prey with its stout claws. If the fish is small it is at once swallowed, if it is large, (and the Osprey will occasionally secure shad, blue fish, bass, etc., weighing five or six pounds,) the fish is carried to a convenient bluff or tree and torn to bits. The Bald Eagle often robs him of the fish by seizing it, or startling him so that he looses his hold.

The Osprey when fishing makes one of the most breezy, spirited pictures connected with the feeding habits of any of our birds, as often there is a splashing and a struggle under water when the fish grasped is too large or the great talons of the bird gets entangled. He is sometimes carried under and drowned, and large fish have been washed ashore with these birds fastened to them by the claws.

Mrs. Mabel Osgood Wright says: "I found an Osprey's nest in a crooked oak on Wakeman's Island in late April, 1893. As I could not get close to the nest (the island is between a network of small creeks, and the flood tides covered the marshes,) I at first thought it was a monstrous crow's nest, but on returning the second week in May I saw a pair of Ospreys coming and going to and fro from the nest. I hoped the birds might return another season, as the nest looked as if it might have been used for two or three years, and was as lop-sided as a poorly made haystack. The great August storm of the same year broke the tree, and the nest fell, making quite a heap upon the ground. Among the debris were sticks of various sizes, dried reeds, two bits of bamboo fishing rod, seaweeds, some old blue mosquito netting, and some rags of fish net, also about half a bushel of salt hay in various stages of decomposition, and malodorous dirt galore."

It is well known that Ospreys, if not disturbed, will continue indefinately to heap rubbish upon their nests till their bulk is very great. Like the Owls they can reverse the rear toe.

THE SORA RAIL.

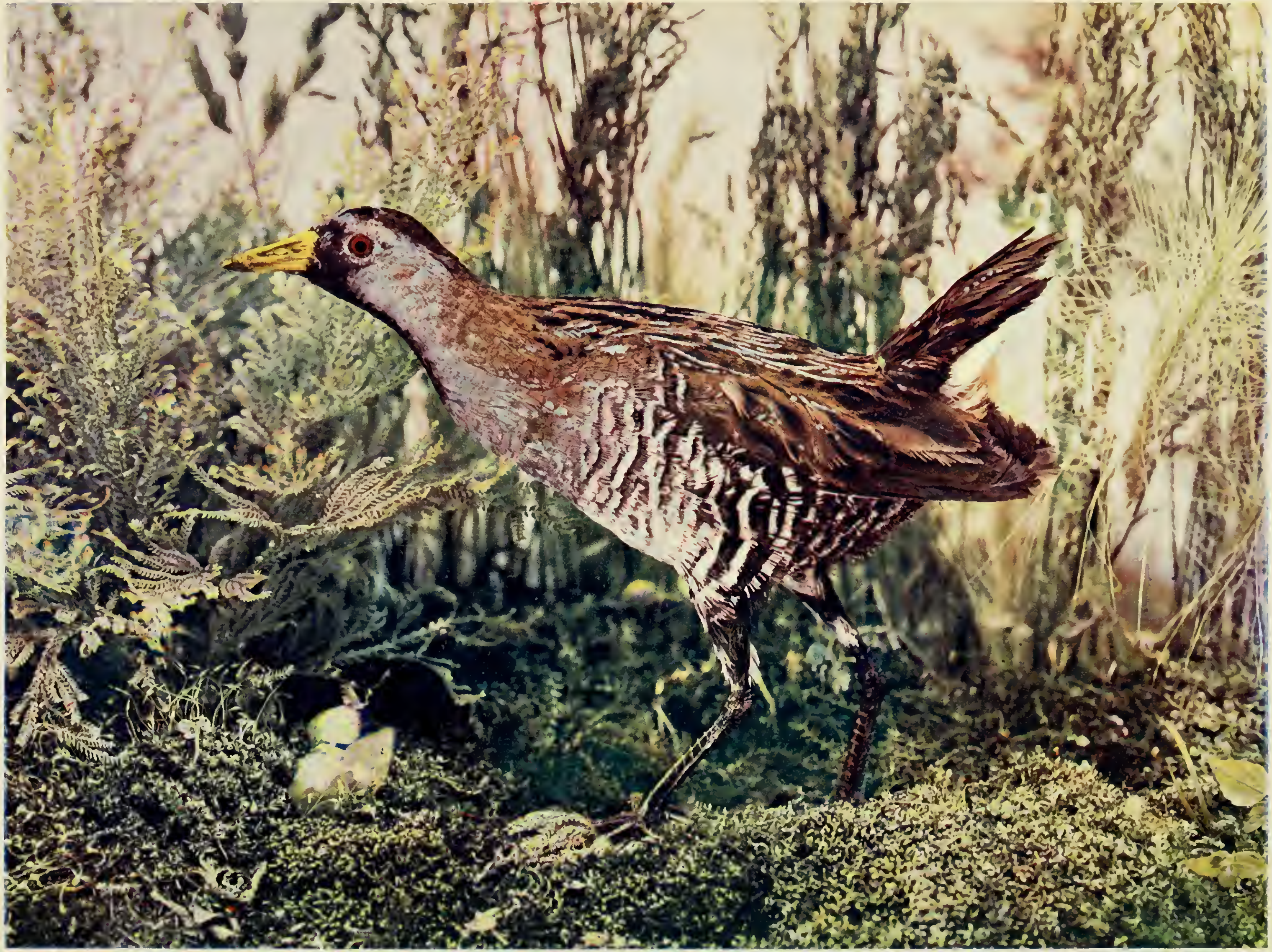
VARIOUS are the names required to distinguish the little slate-colored Carolina Rail from its brethren, Sora, Common Rail, and, on the Potomac river, Ortolan, being among them. He is found throughout temperate North America, in the weedy swamps of the Atlantic states in great abundance, in the Middle states, and in California. In Ohio he is a common summer resident, breeding in the extensive swamps and wet meadows. The nest is a rude affair made of grass and weeds, placed on the ground in a tussock of grass in a boggy tract of land, where there is a growth of briars, etc., where he may skulk and hide in the wet grass to elude observation. The nest may often be discovered at a distance by the appearance of the surrounding grass, the blades of which are in many cases interwoven over the nest, apparently to shield the bird from the fierce rays of the sun, which are felt with redoubled force on the marshes.

The Rails feed on both vegetable and animal food. During the months of September and October, the weeds and wild oats swarm with them. They feed on the nutricious seeds, small snail shells, worms and larvae of insects, which they extract from the mud. The habits of the Sora Rail, its thin, compressed body, its aversion to take wing, and the dexterity with which it runs or conceals itself among the grass and sedge, are exactly similar to those of the more celebrated Virginia Rail.

The Sora frequents those parts of marshes preferably where fresh water springs rise through the morass. Here it generally constructs its nest, "one of which," says an observer, "we had the good fortune to discover. It was built in the bottom of a tuft of grass in the midst of an almost impenetrable quagmire, and was composed altogether of old wet grass and rushes. The eggs had been flooded out of the nest by the extraordinary rise of the tide in a violent northwest storm, and lay scattered about the drift weed. The usual number of eggs is from six to ten. They are of a dirty white or pale cream color, sprinkled with specks of reddish and pale purple, most numerous near the great end."

When on the wing the Sora Rail flies in a straight line for a short distance with dangling legs, and suddenly drops into the water.

The Rails have many foes, and many nests are robbed of their eggs by weasels, snakes, Blackbirds, and Marsh Hawks, although the last cannot disturb them easily, as the Marsh Hawk searches for its food while flying and a majority of the Rails' nests are covered over, making it hard to distinguish them when the Hawk is above.



THE SORA RAIL.

This is one of our fresh-water marsh birds. I show you his picture taken where he spends most of his time.

If it were not for the note calls, these tall reeds and grasses would keep from us the secret of the Rail's home.

Like most birds, though, they must be heard, and so late in the afternoon you may hear their clear note, ker-wee.

From all parts of the marsh you will hear their calls which they keep up long after darkness has set in.

This Rail was just about to step out from the grasses to feed when the artist took his picture. See him—head up, and tail up. He steps along carefully. He feels that it is risky to leave his shelter and is ready at the first sign of danger, to dart back under cover.

There are very few fresh-water marshes where the Rail is not found.

When a boy, I loved to hear their note calls and would spend hours on the edge of a marsh near my home.

It seemed to me there was no life among the reeds and cat-tails of the marsh, but when I threw a stone among them, the Rails would always answer with their *peeps* or *keeks.*

And so I used to go down to the marsh with my pockets filled with stones. Not that I desired or even expected to injure one of these birds. Far from it. It pleased me to hear their calls from the reeds and grass that seemed deserted.

Those of you who live near wild-rice or wild-oat marshes have a good chance to become acquainted with this Rail.

In the south these Rails are found keeping company with the Bobolinks or Reed-birds as they are called down there.

THE KENTUCKY WARBLER.

Although this bird is called the Kentucky Warbler, we must not think he visits that state alone.

We find him all over eastern North America. And a beautiful bird he is.

As his name tells you he is one of a family of Warblers.

I told you somewhere else that the Finches are the largest family of birds. Next to them come the Warblers.

Turn back now and see how many Warblers have been pictured so far.

See if you can tell what things group them as a family. Notice their bills and feet.

This bird is usually found in the dense woods, especially where there are streams of water.

He is a good singer, and his song is very different from that of any of the other Warblers.

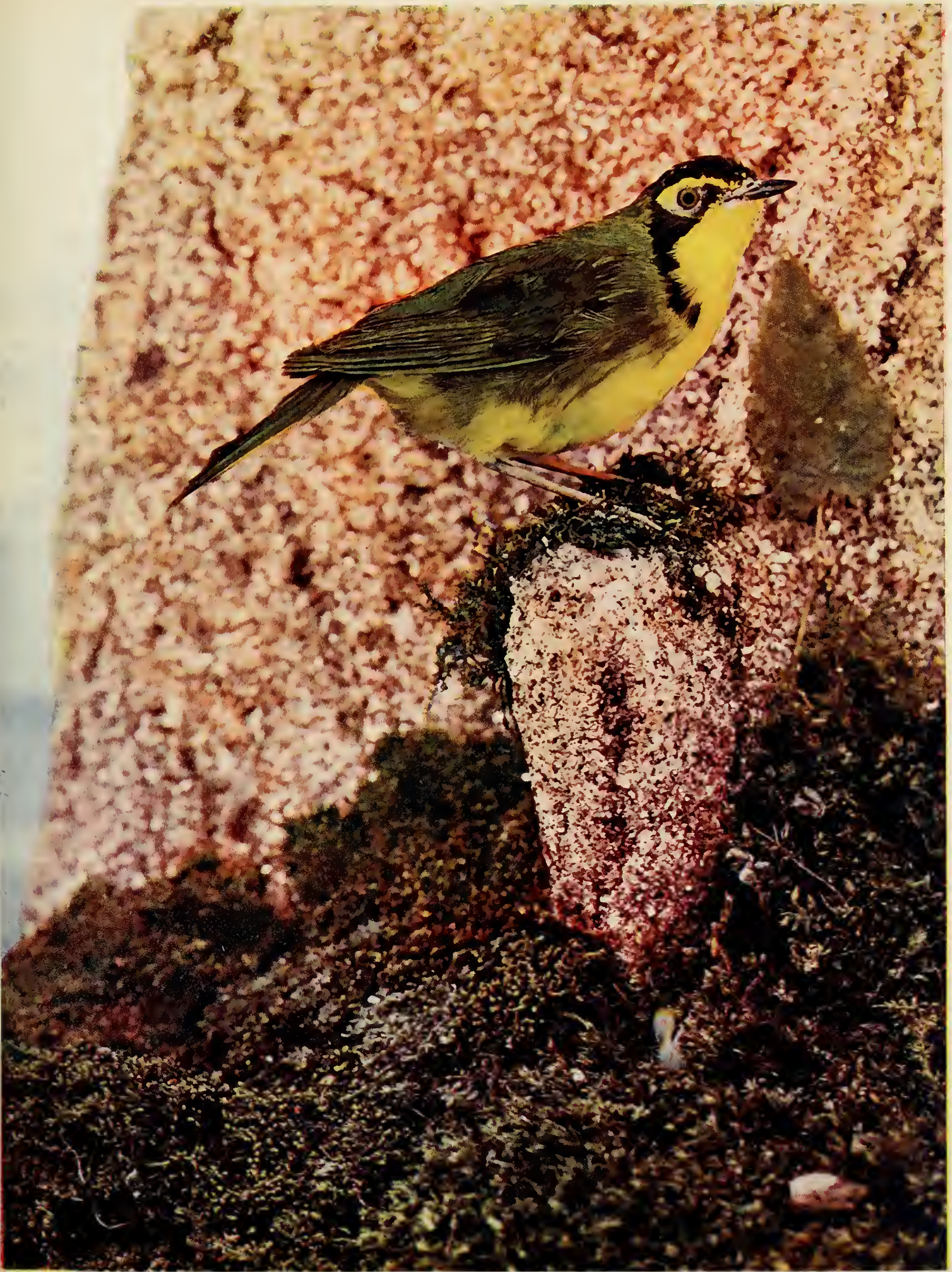
I once watched one of these birds—olive-green above and yellow beneath. His mate was on a nest near by and he was entertaining her with his song.

He kept it up over two hours, stopping only a few seconds between his songs. When I reached the spot with my field-glass I was attracted by his peculiar song. I don't know how long he had been singing. I stayed and spent two hours with him and he showed no signs of stopping. He may be singing yet. I hope he is.

You see him here perched on a granite cliff. I suppose his nest is near by.

He makes it of twigs and rootlets, with several thicknesses of leaves. It is neatly lined with fine rootlets and you will always find it on or near the ground.

In the September and October number of "BIRDS" you will find several Warblers and Finches. Try to keep track of them and may be you can do as many others have done—tell the names of new birds that come along by their pictures which you have seen in "BIRDS."



From col. F. M. Woodruff.

KENTUCKY WARBLER.
Life size.

THE KENTUCKY WARBLER.

BETWEEN sixty and seventy warblers are described by Davie in his "Nests and Eggs of North American Birds," and the Kentucky Warbler is recognized as one of the most beautiful of the number, in its manners almost the counterpart of the Golden Crowned Thrush (soon to delight the eyes of the readers of BIRDS), though it is altogether a more conspicuous bird, both on account of its brilliant plumage and greater activity, the males being, during the season of nesting, very pugnacious, continually chasing one another about the woods. It lives near the ground, making its artfully concealed nest among the low herbage and feeding in the undergrowth, the male singing from some old log or low bush, his song recalling that of the Cardinal, though much weaker.

The ordinary note is a soft *schip*, somewhat like the common call of the Pewee. Considering its great abundance, says an observer, the nest of this charmer is very difficult to find; the female, he thought, must slyly leave the nest at the approach of an intruder, running beneath the herbage until a considerable distance from the nest, when, joined by her mate, the pair by their evident anxiety mislead the stranger as to its location.

It has been declared that no group of birds better deserves the epithet "pretty" than the Warblers. Tanagers are splendid, Humming Birds refulgent, others brilliant, gaudy, or magnificent, but Warblers alone are pretty.

The Warblers are migratory birds, the majority of them passing rapidly across the United States in spring on the way to their northern nesting grounds, and in autumn to their winter residence within the tropics. When the apple trees bloom they revel among the flowers, vieing in activity and numbers with the bees; "now probing the recesses of a blossom for an insect, then darting to another, where, poised daintily upon a slender twig, or suspended from it, they explore hastily but carefully for another morsel. Every movement is the personification of nervous activity, as if the time for their journey was short; as, indeed, appears to be the case, for two or three days at most suffice some species in a single locality."

We recently saw a letter from a gentleman living at Lake Geneva, in which he referred with enthusiasm to BIRDS, because it had enabled him to identify a bird which he had often seen in the apple trees among the blossoms, particularly the present season, with which he was unacquainted by name. It was the Orchard Oriole, and he was glad to have a directory of nature which would enable him to add to his knowledge and correct errors of observation. The idea is a capitol one,and the beautiful Kentucky Warbler, unknown to many who see it often, may be recognized in the same way by residents of southern Indiana and Illinois, Kansas, some localities in Ohio, particularly in the southwestern portion, in parts of New York and New Jersey, in the District of Columbia, and in North Carolina. It has not heretofore been possible, even with the best painted specimens of birds in the hand, to satisfactorily identify the pretty creatures, but with BIRDS as a companion, which may readily be consulted, the student cannot be led into error.

THE RED BREASTED MERGANSER.

WHY this duck should be called red-breasted is not at first apparent, as at a distance the color can not be distinguished, but seen near, the reason is plain. It is a common bird in the United States in winter, where it is found in suitable localities in the months of May and June. It is also a resident of the far north, breeding abundantly in Newfoundland, Labrador, Greenland, and Iceland. It is liberally supplied with names, as Red-breasted Goosander or Sheldrake, Gar-bill, Sea Robin, etc.

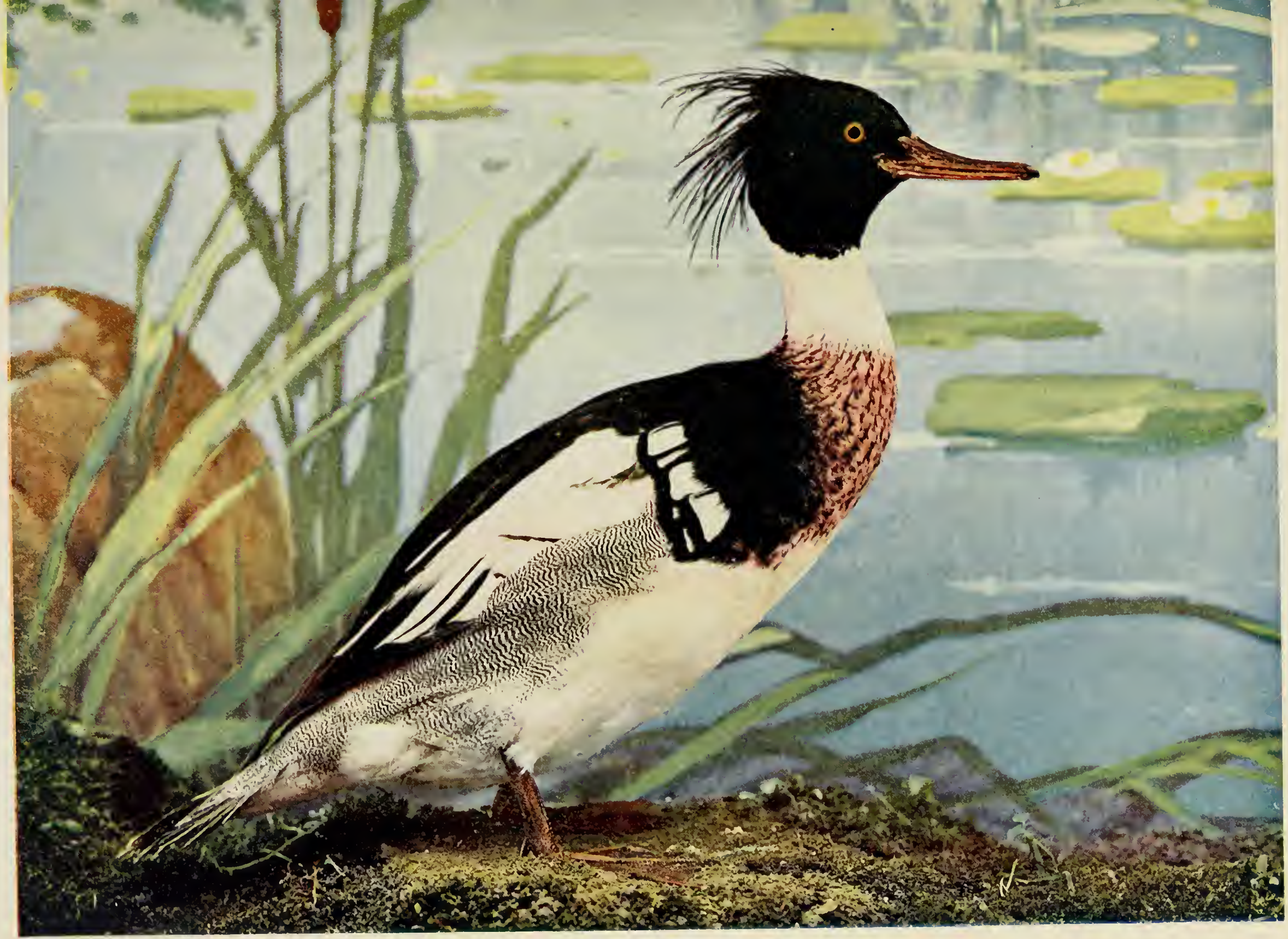
There is a difference in opinion as to the nesting habits of the Red-breast, some authorities claiming that, like the Wood Duck, the nest is placed in the cavity of a tree, others that it is usually found on the ground among brushwood, surrounded with tall grasses and at a short distance from water. Davie says that most generally it is concealed by a projecting rock or other object, the nest being made of leaves and mosses, lined with feathers and down, which are plucked from the breast of the bird. The observers are all probably correct, the bird adapting itself to the situation.

Fish is the chief diet of the Merganser, for which reason its flesh is rank and unpalatable. The Bird's appetite is insatiable, devouring its food in such quantities that it has frequently to disgorge several times before it is able to rise from the water. This Duck can swallow fishes six or seven inches in length, and will attempt to swallow those of a larger size, choking in the effort.

The term Merganser is derived from the plan of the bird's bill, which is furnished with saw teeth fitting into each other.

The eggs of the Red-Breasted Merganser vary from six to twelve, are oval in shape, and are of a yellowish or reddish-drab, sometimes a dull buffy-green.

You may have seen pictures of this Duck, which frequently figures in dining rooms on the ornamental panels of stuffed game birds, but none which could cause you to remember its life-like appearance. You here see before you an actual Red-Breasted Merganser.



From col. J. G. Parker, Jr.

RED-BREASTED MERGANSER.

$^{3}/_{7}$ Life size.

with exactness, will deceive Mistress Pullet herself.

To carry the idea further, we will take the notes of some of the birds depicted in this number of BIRDS. The Osprey, or Fish-Hawk, has been carefully observed, and his only discovered note is a high, rapidly repeated whistle, very plaintive. Doubtless this noise is agreeable and intelligible to his mate, but cannot be called a song, and has no significance to the listener.

The Vulture utters a low, hissing sound when disturbed. This is its only note. Not so with the Bald Eagle, whose scream emulates the rage of the tempest, and implies courage, the quality which associates him with patriotism and freedom. In the notes of the Partridge there is a meaning recognizable by every one. After the nesting season, when the birds are in bevies, their notes are changed to what sportsmen term "scatter calls." Not long after a bevy has been flushed, and perhaps widely scattered, the members of the disunited family may be heard signaling to one another in sweet minor calls of two and three notes, and in excitement, they utter low, twittering notes.

Of the Sora Rails, Mr. Chapman says, "knowing their calls, you have only to pass a May or June evening near a marsh to learn whether they inhabit it. If there, they will greet you late in the afternoon with a clear whistled *ker-wee*, which soon comes from dozens of invisible birds about you, and long after night has fallen, it continues like a springtime chorus of piping hylas. Now and again it is interrupted by a high-voiced, rolling whinney, which, like a call of alarm, is taken up and repeated by different birds all over the marsh."

Poor Red-breasted Merganser! He has only one note, a croak. Perhaps it was of him that Bryant was thinking when he wrote the stanzas "To a Water-Fowl."

"The sentiment of feeling awakened by any of the aquatic fowls is preeminently one of loneliness," says John Burroughs. "The Wood Duck (see July BIRDS) which you approach, starts from the pond or the marsh, the Loon neighing down out of the April sky, the Wild Goose, the Curlew, the Stork, the Bittern, the Sandpiper, etc., awaken quite a different train of emotions from those awakened by the land birds. They all have clinging to them some reminiscence and suggestion of the sea. Their cries echo its wildness and desolation; their wings are the shape of its billows."

But the Evening Grosbeak, the Kentucky Warbler, the Skylark, land birds all, are singers. They have music in their throats and in their souls, though of varying quality. The Grosbeak's note is described by different observers as a shrill *cheepy tee* and a frog-like *peep*, while one writer remarks that the males have a single metallic cry like the note of a trumpet, and the females a loud chattering like the large Cherry Birds.

The Kentucky Warbler's song is entirely unlike that of any other Warbler, and is a loud, clearly whistled performance of five, six, or seven notes, *turdle*, *turdle*, *turdle*, resembling in tone some of the calls of the Carolina Wren. He is so persistent in his singing, however, that the Red-Breasted Merganser's simple croak would sometimes be preferable to it.

But the Skylark—

"All the earth and air
With thy voice is loud,
As, when night is bare
From one lonely cloud
The moon rains out her beams and heaven is over-flowed."

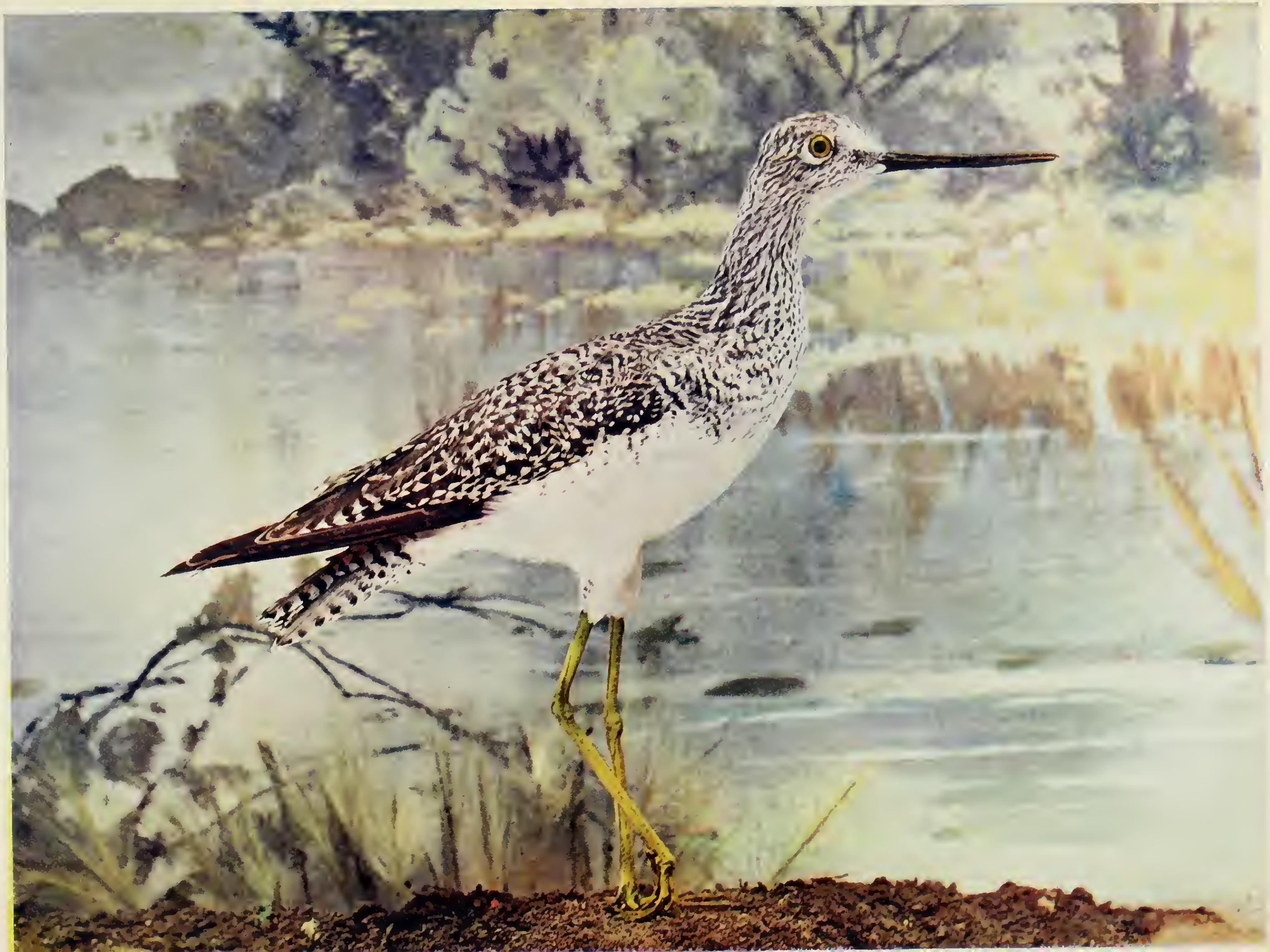
—C. C. MARBLE.

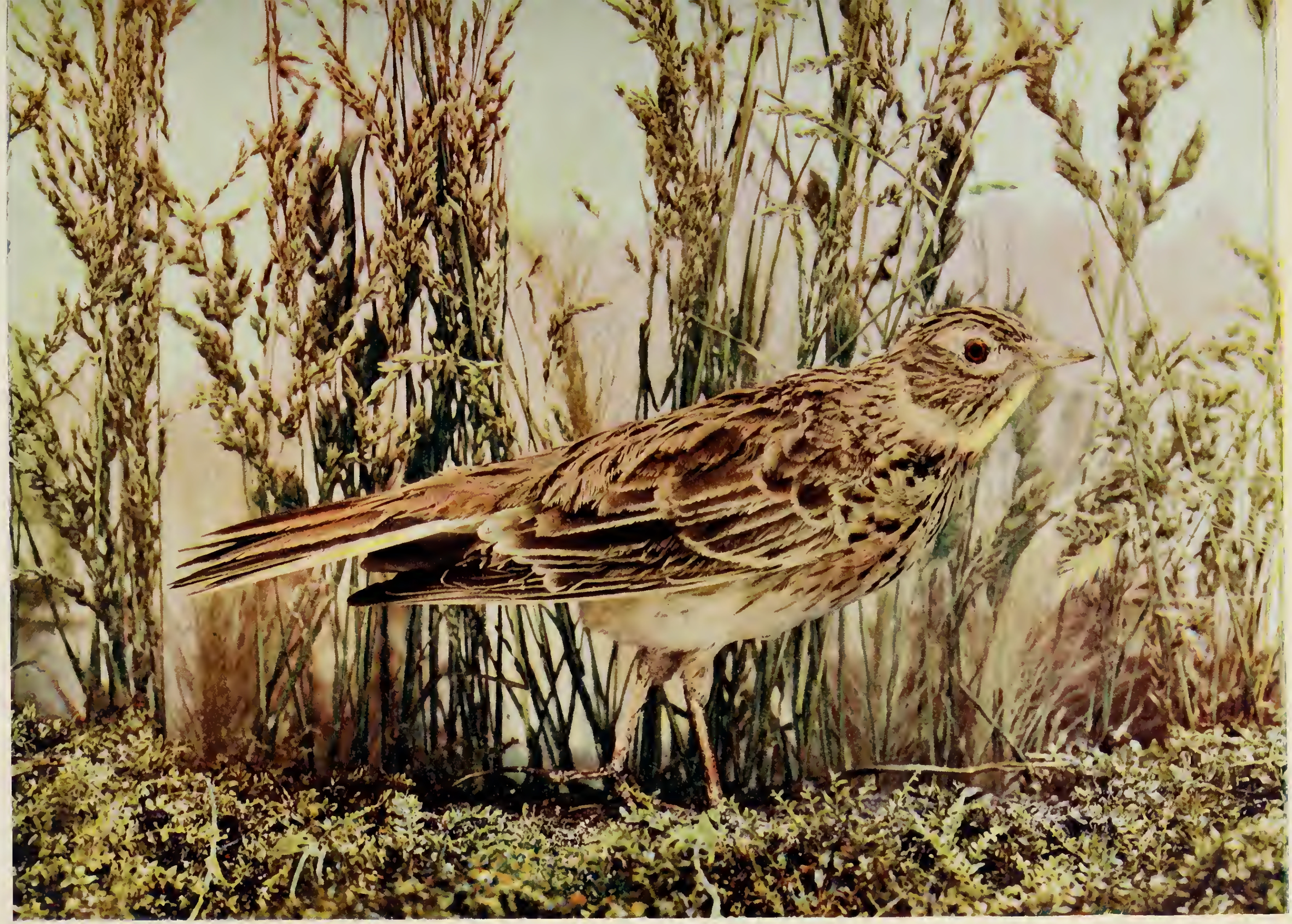
THE YELLOW LEGS.

YELLOW LEGS, or Lesser Tell tale sometimes called Yellow-leg Snipe, and Little Cucu, inhabits the whole of North America, nesting in the cold temperate and subarctic districts of the northern continent, migrating south in winter to Argentine and Chili. It is much rarer in the western than eastern province of North America, and is only accidental in Europe. It is one of the wading birds, its food consisting of larvae of insects, small shell fish and the like.

The nest of the Lesser Yellow Shanks, which it is sometimes called, is a mere depression in the ground, without any lining. Sometimes, however, it is placed at the foot of a bush, with a scanty lining of withered leaves. Four eggs of light drab, buffy or cream color, sometimes of light brown, are laid, and the breast of the female is found to be bare of feathers when engaged in rearing the young. The Lesser Yellow legs breeds in central Ohio and Illinois, where it is a regular summer resident, arriving about the middle of April, the larger portion of flocks passing north early in May and returning about the first of September to remain until the last of October.

A nest of this species of Snipe was found situated in a slight depression at the base of a small hillock near the border of a prairie slough near Evanston, Illinois, and was made of grass stems and blades. The color of the eggs in this instance was a deep grayish white, three of which were marked with spots of dark brown, and the fourth egg with spots and well defined blotches of a considerably lighter shade of the same.





From col. F. M. Woodruff.

SKY LARK.
6/7 Life size.

THE SKYLARK.

This is not an American bird. I have allowed his picture to be taken and placed here because so many of our English friends desired it.

The skylark is probably the most noted of birds in Europe. He is found in all of the countries of Europe, but England seems to claim it. Here it stays during the summer, and goes south in the winter.

Like our own Meadow Lark, he likes best to stay in the fields. Here you will find it when not on the wing.

Early in the spring the Skylark begins his song, and he may be heard for most of the year.

Sometimes he sings while on the ground, but usually it is while he is soaring far above us.

Skylarks do not often seek the company of persons. There are some birds, you know, that seem happy only when they are near people. Of course, they are somewhat shy, but as a rule they prefer to be near people. While the Skylark does not seek to be near persons, yet it is not afraid of them.

A gentleman, while riding through the country, was surprised to see a Skylark perch on his saddle. When he tried to touch it, the Lark moved along on the horse's back, and finally dropped under the horse's feet. Here it seemed to hide. The rider, looking up, saw a hawk flying about. This explained the cause of the skylark's strange actions.

A pair of these Larks had built their nest in a meadow. When the time came for mowing the grass, the little ones were not large enough to leave the nest. The mother bird laid herself flat on the ground, with her wings spread out. The father bird took one of the little ones from the nest and placed it on the mother's back. She flew away, took the baby bird to a safe place, and came back for another.

This time the father took his turn. In this way they carried the little ones to a safe place before the mowers came.

Like our Meadow Lark, the Skylark builds her nest on the ground—never in bushes or trees. Usually it is built in a hole below the surface of the ground. It is for this reason that it is hard to find.

Then, too, the color of the nest is much like that of the ground.

Four or five eggs are usually laid, and in two weeks the little larks crack the shells, and come into the world crying for worms and bugs.

THE SKYLARK.

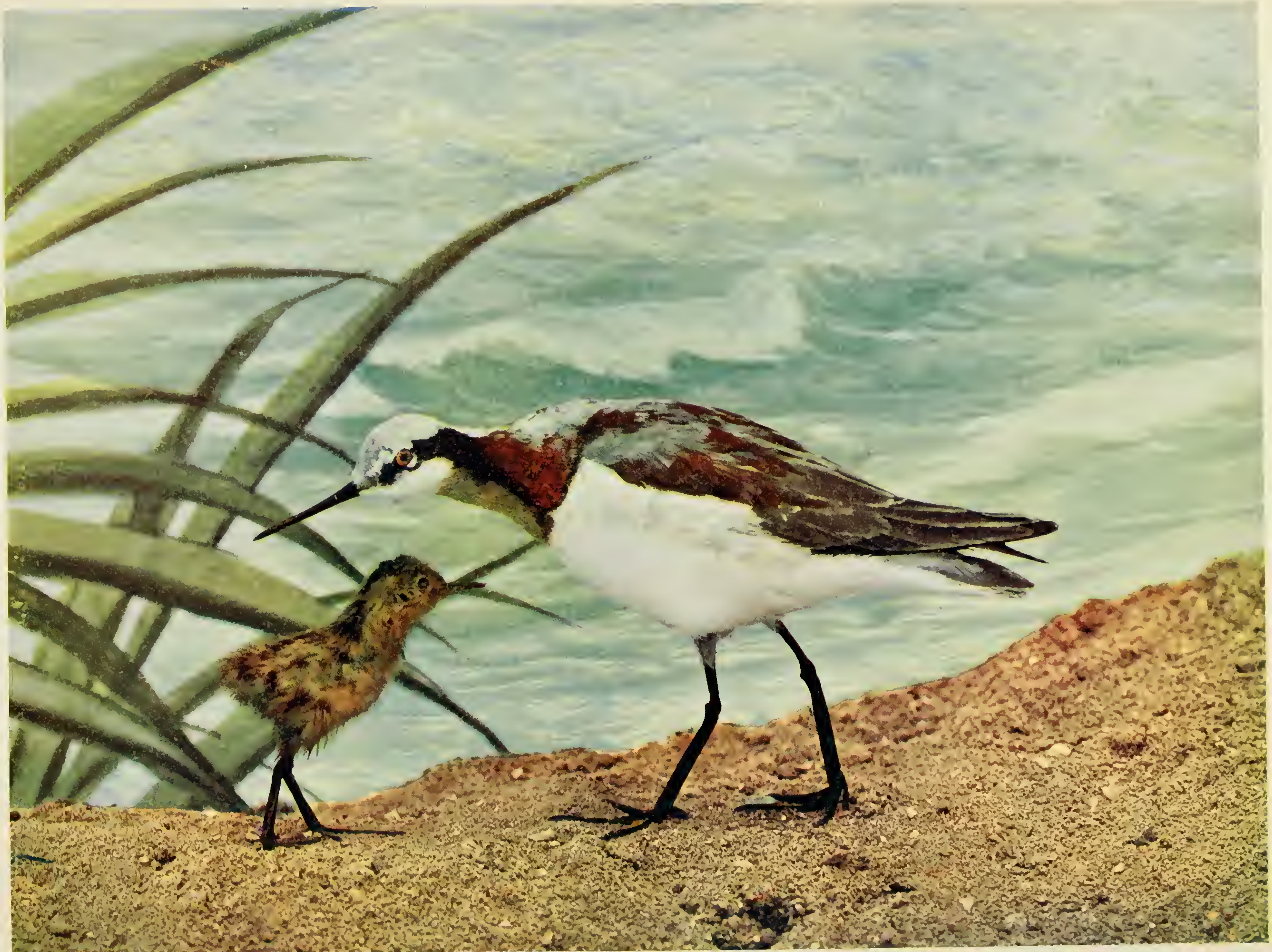
THE English Skylark has been more celebrated in poetry than any other song-bird. Shelley's famous poem is too long to quote and too symmetrical to present in fragmentary form. It is almost as musical as the sweet singer itself.

‘By the first streak of dawn," says one familiar with the Skylark, "he bounds from the dripping herbage, and on fluttering wings mounts the air for a few feet ere giving forth his cheery notes. Then upward, apparently without effort he sails, sometimes drifting far away as he ascends, borne as it were by the ascending vapors, so easily he mounts the air. His notes are so pure and sweet, and yet so loud and varied withal, that when they first disturb the air of early morning all the other little feathered tenants of the fields and hedgerows seem irresistibly compelled to join him in filling the air with melody. Upwards, ever upwards, he mounts, until like a speck in the highest ether he appears motionless; yet still his notes are heard, lovely in their faintness, now gradually growing louder and louder as he descends, until within a few yards of the earth they cease, and he drops like a fragment hurled from above into the herbage, or flits about it for a short distance ere alighting." The Lark sings just as richly on the ground as when on quivering wing. When in song he is said to be a good guide to the weather, for whenever we see him rise into the air, despite the gloomy looks of an overcast sky, fine weather is invariably at hand.

The nest is most frequently in the grass fields, sometimes amongst the young corn, or in places little frequented. It is made of dry grass and moss, and lined with fibrous roots and a little horse hair. The eggs, usually four or five in number, are dull white, spotted, clouded, and blotched over the entire surface with brownish green. The female Lark, says Dixon, like all ground birds, is a very close sitter, remaining faithful to her charge. She regains her nest by dropping to the ground a hundred yards or more from its concealment.

The food of the Lark is varied,—in spring and summer, insects and their larvae, and worms and slugs, in autumn and winter, seeds.

Olive Thorne Miller tells this pretty anecdote of a Skylark which she emancipated from a bird store: "I bought the skylark, though I did not want him. I spared no pains to make the stranger happy. I procured a beautiful sod of uncut fresh grass, of which he at once took possession, crouching or sitting low among the stems, and looking most bewitching. He seemed contented, and uttered no more that appealing cry, but he did not show much intelligence. His cage had a broad base behind which he delighted to hide, and for hours as I sat in the room I could see nothing of him, although I would hear him stirring about. If I rose from my seat he was instantly on the alert, and stretched his head up to look over at me. I tried to get a better view of him by hanging a small mirror at an angle over his cage, but he was so much frightened by it that I removed it." "This bird," Mrs. Miller says "never seemed to know enough to go home. Even when very hungry he would stand before his wide open door, where one step would take him into his beloved grass thicket, and yet that one step he would not take. When his hunger became intolerable he ran around the room, circled about his cage, looking in, recognizing his food dishes, and trying eagerly to get between the wires to reach them; and yet when he came before the open door he would stand and gaze, but never go in. After five months' trial, during which he displayed no particular intelligence, and never learned to enter his cage, he passed out of the bird room, but not into a store."



WILSON'S PHALAROPE.

PERHAPS the most interesting, as it is certainly the most uncommon, characteristic of this species of birds is that the male relieves his mate from all domestic duties except the laying of the eggs. He usually chooses a thin tuft of grass on a level spot, but often in an open place concealed by only a few straggling blades. He scratches a shallow depression in the soft earth, lines it with a thin layer of fragments of old grass blades, upon which the eggs, three or four, are laid about the last of May or first of June. Owing to the low situation in which the nest is placed, the first set of eggs are often destroyed by a heavy fall of rain causing the water to rise so as to submerge the nest. The instinct of self preservation in these birds, as in many others, seems lacking in this respect. A second set, numbering two or three, is often deposited in a depression scratched in the ground, as at first, but with no sign of any lining.

Wilson's Phalarope is exclusively an American bird, more common in the interior than along the sea coast. The older ornithologists knew little of it. It is now known to breed in northern Illinois, Iowa, Wisconsin, Minnesota, the Dakotas, Utah, and Oregon. It is recorded as a summer resident in northern Indiana and in western Kansas. Mr. E. W. Nelson states that it is the most common species in northern Illinois, frequenting grassy marshes and low prairies, and is not exceeded in numbers even by the ever-present Spotted Sandpiper. While it was one of our most common birds in the Calumet region it is now becoming scarce.

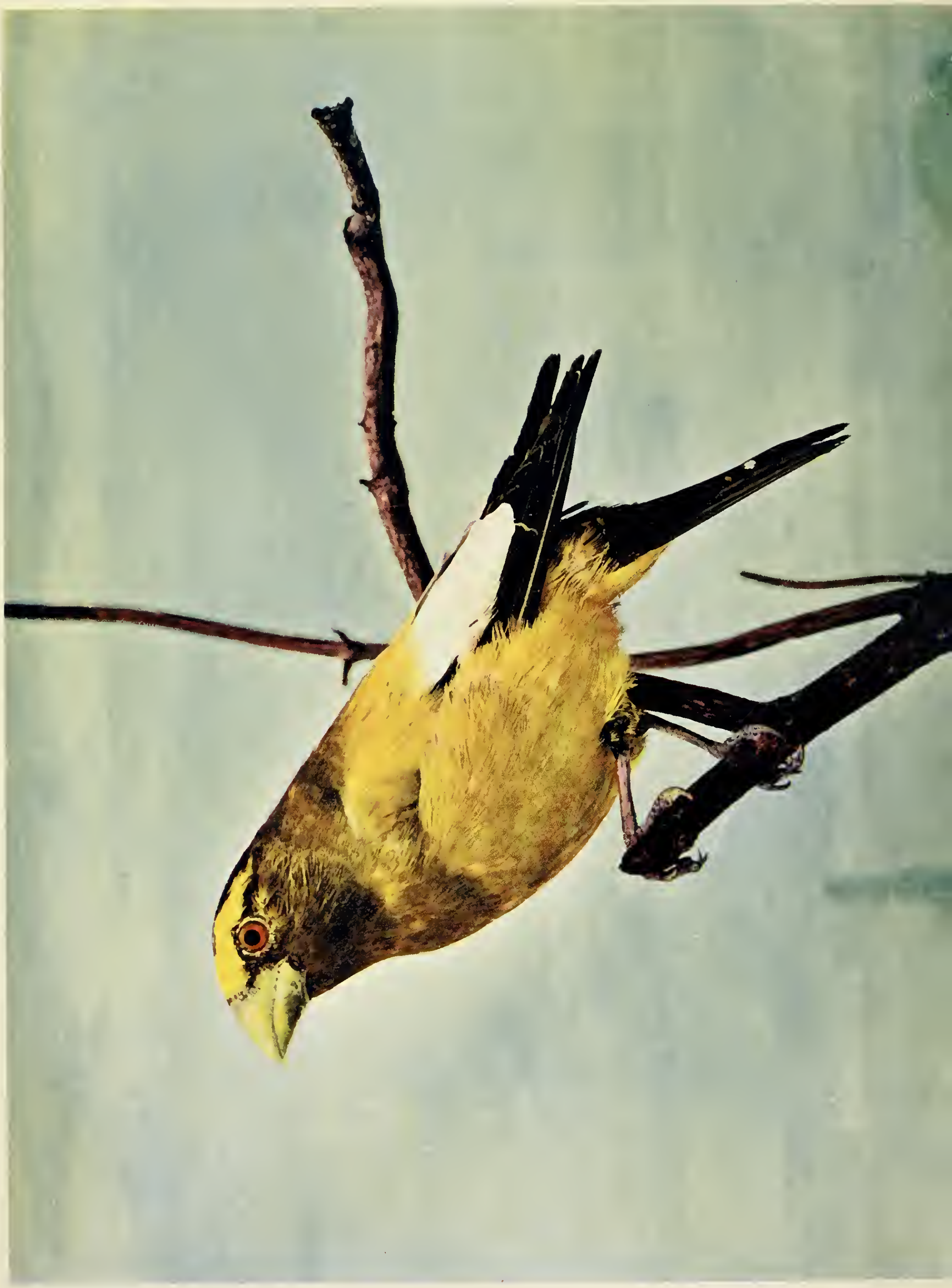
The adult female of this beautiful species is by far the handsomest of the small waders. The breeding plumage is much brighter and richer than that of the male, another peculiar characteristic, and the male alone possesses the naked abdomen. The female always remains near the nest while he is sitting, and shows great solicitude upon the approach of an intruder. The adults assume the winter plumage during July.

THE EVENING GROSBEAK.

HANDSOMER birds there may be, but in the opinion of many this visitant to various portions of western North America is in shape, color, and markings one of the most exquisite of the feather-wearers. It has for its habitation the region extending from the plains to the Pacific ocean and from Mexico into British America. Toward the North it ranges further to the east; so that, while it appears to be not uncommon about Lake Superior, it has been reported as occuring in Ohio, New York, and Canada. In Illinois it was observed at Freeport during the winter of 1870 and 1871, and at Waukegan during January, 1873. It is a common resident of the forests of the State of Washington, and also of Oregon. In the latter region Dr. Merrill observed the birds carrying building material to a huge fir tree, but was unable to locate the nest, and the tree was practically inaccessable. Mr. Walter E. Bryant was the first to record an authentic nest and eggs of the Evening Grosbeak. In a paper read before the California Academy of Sciences he describes a nest of this species containing four eggs, found in Yolo county, California. The nest was built in a small live oak, at a height of ten feet, and was composed of small twigs supporting a thin layer of fibrous bark and a lining of horse hair. The eggs are of a clear greenish-ground color, blotched with pale brown. According to Mr. Davie, one of the leading authorities on North American birds, little if any more information has been obtained regarding the nests and eggs of the Evening Grosbeak.

As to its habits, Mr. O. P. Day says, that about the year 1872, while hunting during fine autumn weather in the woods about Eureka, Illinois, he fell in with a number of these Grosbeaks. They were feeding in the tree tops no the seeds of the sugar maple, just then ripening, and were excessively fat. They were very unsuspicious, and for a long time suffered him to observe them. They also ate the buds of the cottonwood tree in company with the Rose-Breasted Grosbeak.

The song of the Grosbeak is singularly like that of the Robin, and to one not thoroughly familiar with the notes of the latter a difference would not at first be detected. There is a very decided difference, however, and by repeatedly listening to both species in full voice it will be discovered more and more clearly. The sweet and gentle strains of music harmonize delightfully, and the concert they make is well worth the careful attention of the discriminating student. The value of such study will be admitted by all who know how little is known of the songsters. A gentleman recently said to us that one day in November the greater part of the football field at the south end of Lincoln Park was covered with Snow Birds. There were also on the field more than one hundred grammar and high school boys waiting the arrival of the football team. There was only one person present who paid any attention to the birds which were picking up the food, twittering, hopping, and flying about, and occasionally indulging in fights, and all utterly oblivious of the fact that there were scores of shouting school boys around and about them. The gentleman called the attention of one after another of ten of the high school boys to the snow birds and asked what they were. They one and all declared they were English Sparrows, and seemed astounded that any one could be so ignorant as not to know what an English Sparrow was. So much for the city-bred boy's observation of birds.



THE EVENING GROSBEAK.

In the far Northwest we find this beautiful bird the year around. During the winter he often comes farther south in company with his cousin, the Rose-breasted Grosbeak.

What a beautiful sight it must be to see a flock of these birds—Evening Grosbeaks and Rose-breasted in their pretty plumage.

Grosbeaks belong to a family called Finches. The Sparrows, Buntings, and Crossbills belong to the same family. It is the largest family among birds.

You will notice that they all have stout bills. Their food is mostly grains and their bills are well formed to crush the seeds.

Look at your back numbers of "Birds" and notice the pictures of the other Finches I have named. Don't you think Dame Nature is very generous with her colors sometimes?

Only a few days ago while strolling through the woods with my field glass, I saw a pretty sight. On one tree I saw a Red-headed Woodpecker, a Flicker, an Indigo Bunting, and a Rose-breasted Grosbeak. I thought then, if we could only have the Evening Grosbeak our group of colors would be complete.

Have you ever wondered at some birds being so prettily dressed while others have such dull colors?

Some people say that the birds who do not sing must have bright feathers to make them attractive. We cannot believe this. Some of our bright colored birds are sweet singers, and surely many of our dull colored birds cannot sing very well.

Next month you will see the pictures of several home birds. See if dull colors have anything to do with sweet song.

THE TURKEY VULTURE.

This bird is found mostly in the southern states. Here he is known by the more common name of Turkey Buzzard.

He looks like a noble bird but he isn't. While he is well fitted for flying, and might, if he tried, catch his prey, he prefers to eat dead animals.

The people down south never think of burying a dead horse or cow. They just drag it out away from their homes and leave it to the Vultures who are sure to dispose of it.

It is very seldom that they attack a live animal.

They will even visit the streets of the cities in search of dead animals for food, and do not show much fear of man. Oftentimes they are found among the chickens and ducks in the barnyard, but have never been known to kill any.

One gentleman who has studied the habits of the Vulture says that it has been known to suck the eggs of Herons. This is not common, though. As I said they prefer dead animals for their food and even eat their own dead.

The Vulture is very graceful while on the wing. He sails along and you can hardly see his wings move as he circles about looking for food on the ground below.

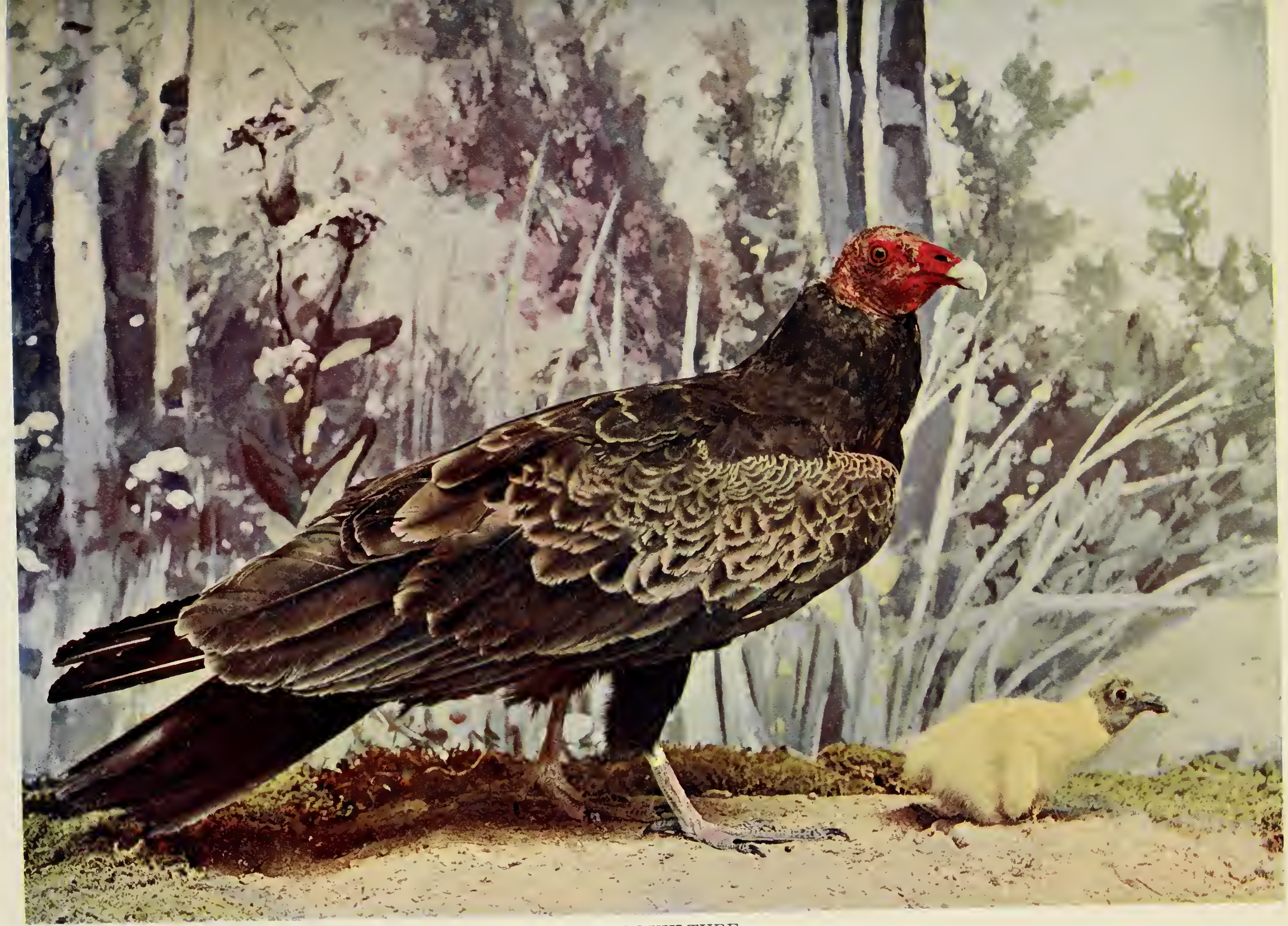
Many people think the Vulture looks much like our tame turkey.

If you know of a turkey near by, just compare this picture with it and you won't think so.

See how chalk-white his bill is. No feathers on his head, but a bright red skin.

What do think of the young chick? It doesn't seem as though he could ever be the large, heavy bird his parent seems to be.

Now turn back to the first page of July "BIRDS" and see how he differs from the Eagle.



From col. F. M. Woodruff.

TURKEY VULTURE.
¼ Life size.

THE TURKEY VULTURE.

TURKEY BUZZARD is the familiar name applied to this bird, on account of his remarkable resemblance to our common Turkey. This is the only respect however, in which they are alike. It inhabits the United States and British Provinces from the Atlantic to the Pacific, south through Central and most of South America. Every farmer knows it to be an industrious scavenger, devouring at all times the putrid or decomposing flesh of carcasses. They are found in flocks, not only flying and feeding in company, but resorting to the same spot to roost; nesting also in communities; depositing their eggs on the ground, on rocks, or in hollow logs and stumps, usually in thick woods or in a sycamore grove, in the bend or fork of a stream. The nest is frequently built in a tree, or in the cavity of a sycamore stump, though a favorite place for depositing the eggs is a little depression under a small bush or overhanging rock on a steep hillside.

Renowned naturalists have long argued that the Vulture does not have an extraordinary power of smell, but, according to Mr. Davie, an excellent authority, it has been proven by the most satisfactory experiments that the Turkey Buzzard does possess a keen sense of smell by which it can distinguish the odor of flesh at a great distance.

The flight of the Turkey Vulture is truly beautiful, and no landscape with its patches of green woods and grassy fields, is perfect without its dignified figure high in the air, moving round in circles, steady, graceful and easy, and apparently without effort. "It sails," says Dr. Brewer, "with a steady, even motion, with wings just above the horizontal position, with their tips slightly raised, rises from the ground with a single bound, gives a few flaps of the wings, and then proceeds with its peculiar soaring flight, rising very high in the air."

The Vulture pictured in the accompanying plate was obtained between the Brazos river and Matagorda bay. With it was found the Black Vulture, both nesting upon the ground. As the nearest trees were thirty or forty miles distant these Vultures were always found in this situation. The birds selected an open spot beneath a heavy growth of bushes, placing the eggs upon the bare ground. The old bird when approached would not attempt to leave the nest, and in the case of the young bird in the plate, the female to protect it from harm, promptly disgorged the putrid contents of her stomach, which was so offensive that the intruder had to close his nostrils with one hand while he reached for the young bird with the other.

The Turkey Vulture is a very silent bird, only uttering a hiss of defiance or warning to its neighbors when feeding, or a low gutteral croak of alarm when flying low overhead.

The services of the Vultures as scavengers in removing offal render them valuable, and almost a necessity in southern cities. If an animal is killed and left exposed to view, the bird is sure to find out the spot in a very short time, and to make its appearance as if called by some magic spell from the empty air.

"Never stoops the soaring Vulture
On his quarry in the desert,
On the sick or wounded bison,
But another Vulture, watching,
From his high aerial lookout,
Sees the downward plunge and follows;
And a third pursues the second,
Coming from the invisible ether,
First a speck, and then a Vulture,
Till the air is dark with pinions."

TO A WATER FOWL.

Whither, 'midst falling dew
  While glow the heavens with the last steps of day,
Far through their rosy depths dost thou pursue
  Thy solitary way?

Vainly the fowler's eye
  Might mark thy distant flight to do thee wrong,
As, darkly painted on the crimson sky,
  Thy figure floats along.

Seek'st thou the plashy brink
  Of weedy lake, or marge of river wide,
Or where the rocky billows rise and sink
  On the chafed ocean side.

There is a Power whose care
  Teaches thy way along that pathless coast—
The desert and illimitable air—
  Lone wandering, but not lost.

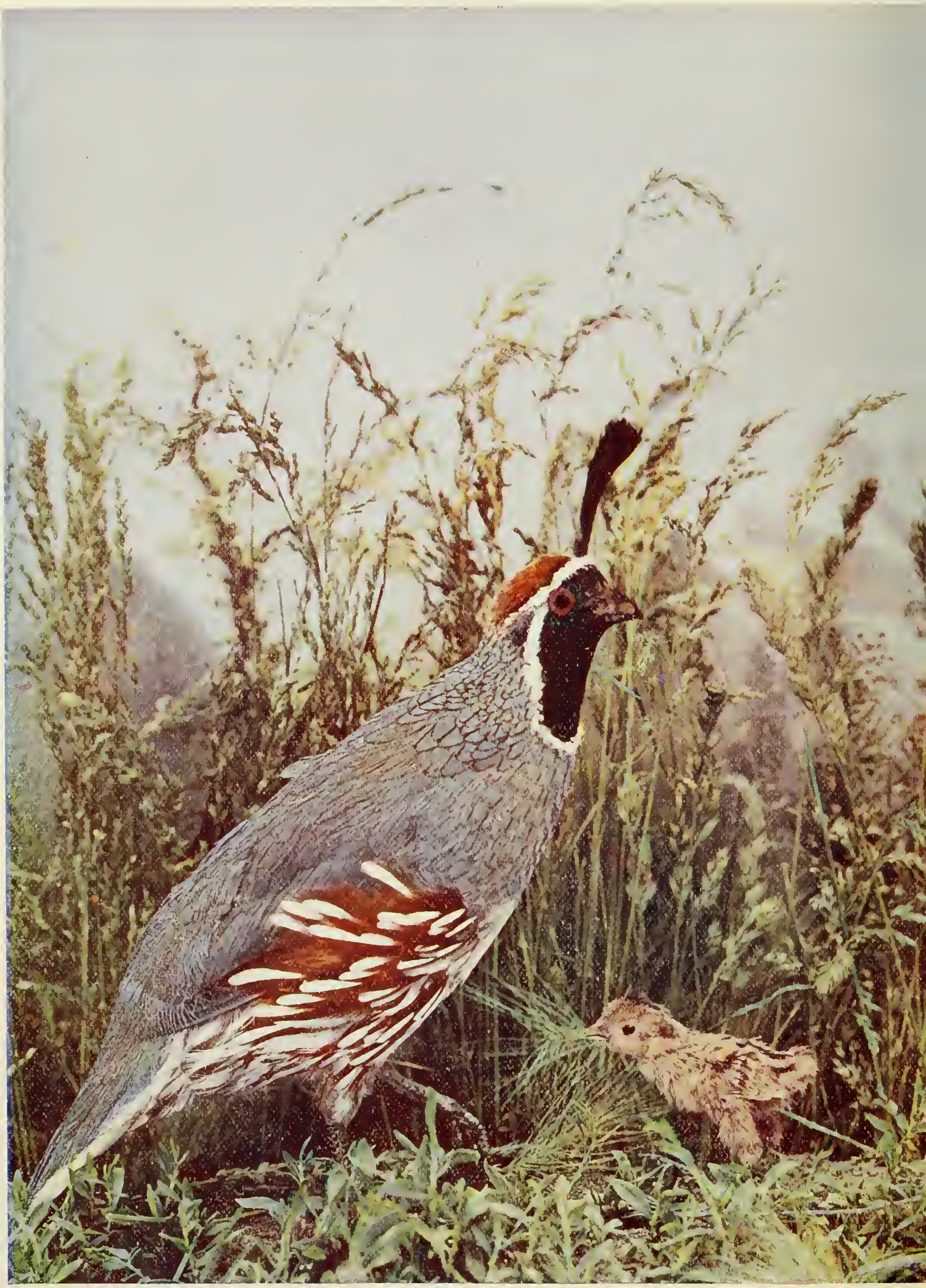
All day thy wings have fanned,
  At that far height, the cold thin atmosphere,
Yet stoop not, weary, to the welcome land
  Though the dark night is near.

And soon that toil shall end;
  Soon shalt thou find a summer home, and nest,
And scream among thy fellows; reeds shall bend,
  Soon o'er thy sheltered nest.

Thou'rt gone, the abyss of heaven
  Hath swallowed up thy form; yet on my heart
Deeply has sunk the lesson thou hast given,
  And shall not soon depart.

He who, from zone to zone,
  Guides through the boundless sky thy certain flight,
In the long way that I must tread alone,
  Will lead my steps aright.

William Cullen Bryant.



From col. F. M. Woodruff.

GAMBEL'S PARTRIDGE.
½ Life size.

CHICAGO COLORTYP

GAMBEL'S PARTRIDGE.

GAMBEL'S PARTRIDGE, of which comparatively little is known, is a characteristic game bird of Arizona and New Mexico, of rare beauty, and with habits similar to others of the species of which there about two hundred. Mr. W. E. D. Scott found the species distributed throughout the entire Catalina region in Arizona below an altitude of 5,000 feet. The bird is also known as the Arizona Quail.

The nest is made in a depression in the ground sometimes without any lining. From eight to sixteen eggs are laid. They are most beautifully marked on a creamy-white ground with scattered spots and blotches of old gold, and sometimes light drab and chestnut red. In some specimens the gold coloring is so pronounced that it strongly suggests to the imagination that this quail feeds upon the grains of the precious metal which characterizes its home, and that the pigment is imparted to the eggs.

After the nesting season these birds commonly gather in "coveys" or bevies, usually composed of the members of but one family. As a rule they are terrestrial, but may take to trees when flushed. They are game birds *par excellence*, and, says Chapman, trusting to the concealment afforded by their dull colors, attempt to avoid detection by hiding rather than by flying. The flight is rapid and accompanied by a startling whirr, caused by the quick strokes of their small, concave, stiff-feathered wings. They roost on the ground, tail to tail, with heads pointing outward; "a bunch of closely huddled forms—a living bomb whose explosion is scarcely less startling than that of dynamite manufacture."

The Partridge is on all hands admitted to be wholly harmless, and at times beneficial to the agriculturist. It is an undoubted fact that it thrives with the highest system of cultivation, and the lands that are the most carefully tilled, and bear the greatest quantity of grain and green crops, generally produce the greatest number of Partridges.

SUMMARY.

Page 43.

AMERICAN OSPREY.—*Pandion paliaetus carolinensis.*

Range—North America; breeds from Florida to Labrador; winters from South Carolina to northern South America.

Nest—Generally in a tree, thirty to fifty feet from the ground, rarely on the ground.

Eggs—Two to four; generally buffy white, heavily marked with chocolate.

Page 48.

SORA RAIL.—*Porzana carolina.*

Range—Temperate North America, south to the West Indies and northern South America.

Nest—Of grass and reeds, placed on the ground in a tussock of grass, where there is a growth of briers.

Eggs—From seven to fourteen; of a ground color, of dark cream or drab, with reddish brown spots.

Page 51.

KENTUCKY WARBLER. — *Geothlypis formosa.*

Range—Eastern United States; breeds from the Gulf States to Iowa and Connecticut; winters in Central America.

Nest—Bulky, of twigs and rootlets, firmly wrapped with leaves, on or near the ground.

Eggs—Four or five; white or grayish white, speckled or blotched with rufous.

Page 55

RED-BREASTED MERGANSER. — *Merganser Serrator.*

Range—Northern parts of the Northern Hemisphere; in America breeds from northern Illinois and New Brunswick northward to the arctic regions; winters southward to Cuba.

Nest—Of leaves, grasses, mosses, etc., lined with down, on the ground near water, among rocks or scrubby bushes.

Eggs—Six to twelve; creamy buff.

Page 60.

YELLOW-LEGS.—*Totanus flavipes.*

Range—North America, breeding chiefly in the interior from Minnesota, northern Illinois, Ontario County, N. Y., northward to the Arctic regions; winters from the Gulf States to Patagonia.

Eggs—Three or four; buffy, spotted or blotched with dark madder—or van dyke—brown and purplish gray.

Page 61.

SKYLARK.—*Alauda arvensis.*

Range—Europe and portions of Asia and Africa; accidental in the Bermudas and in Greenland.

Nest—Placed on the ground, in meadows or open grassy places, sheltered by a tuft of grass; the materials are grasses, plant stems, and a few chance leaves.

Eggs—Three to five, of varying form, color, and size.

Page 66.

WILSON'S PHALAROPE. — *Phalaropus tricolor.*

Range—Temperate North America, breeding from northern Illinois and Utah northward to the Saskatchewan region; south in winter to Brazil and Patagonia.

Nest—A shallow depression in soft earth, lined with a thin layer of fragments of grass.

Eggs—Three to four; cream buff or buffy white, heavily blotched with deep chocolate.

Page 70.

EVENING GROSBEAK. — *Cocothraustes vespertina.*

Range—Interior of North America, from Manitoba northward; southeastward in winter to the upper Mississippi Valley and casually to the northern Atlantic States.

Nest—Of small twigs, lined with bark, hair, or rootlets, placed within twenty feet of the ground.

Eggs—Three or four; greenish, blotched with pale brown.

Page 73.

TURKEY VULTURE.—*Catharista Atrata.*

Range—Temperate America, from New Jersey southward to Patagonia.

Nest—In hollow stump or log, or on ground beneath bushes or palmettos.

Eggs—One to three; dull white, spotted and blotched with chocolate marking.

Page 78.

GAMBEL'S PARTRIDGE. — *Callipepla gambeli*

Range—Northwestern Mexico, Arizona, New Mexico, southern Utah, and western Utah and western Texas.

Nest—Placed on the ground, sometimes without any lining.

Eggs—From eight to sixteen.

BIRDS.

ILLUSTRATED BY COLOR PHOTOGRAPHY.

VOL. II. SEPTEMBER. NO. 3.

BIRD SONG.

How songs are made
Is a mystery,
Which studied for years
Still baffles me.
—R. H. STODDARD.

"SOME birds are poets and sing all summer," says Thoreau. "They are the true singers. Any man can write verses in the love season. We are most interested in those birds that sing for the love of music, and not of their mates; who meditate their strains and amuse themselves with singing; the birds whose strains are of deeper sentiment."

Thoreau does not mention by name any of the poet-birds to which he alludes, but we think our selections for the present month include some of them. The most beautiful specimen of all, which is as rich in color and "sun-sparkle" as the most polished gem to which he owes his name, the Ruby-throated Humming-bird, cannot sing at all, uttering only a shrill mouse-like squeak. The humming sound made by his wings is far more agreeable than his voice, for "when the mild gold stars flower out" it announces his presence. Then

> "A dim shape quivers about
> Some sweet rich heart of a rose."

He hovers over all the flowers that possess the peculiar sweetness that he loves—the blossoms of the honeysuckle, the red, the white, and the yellow roses, and the morning glory. The red clover is as sweet to him as to the honey bee, and a pair of them may often be seen hovering over the blossoms for a moment, and then disappearing with the quickness of a flash of light, soon to return to the same spot and repeat the performance. *Squeak, squeak!* is probably their call note.

Something of the poet is the Yellow Warbler, though his song is not quite as long as an epic. He repeats it a little too often, perhaps, but there is such a pervading cheerfulness about it that we will not quarrel with the author. *Sweet-sweet-sweet-sweet-sweet-sweeter-sweeter!* is his frequent contribution to the volume of nature, and all the while he is darting about the trees, "carrying sun-glints on his back wherever he goes." His song is appropriate to every season, but it is in the spring, when we hear it first, that it is doubly welcome to the ear. The grateful heart asks with Bourdillon:

> "What tidings hath the Warbler heard
> That bids him leave the lands of summer
> For woods and fields where April yields
> Bleak welcome to the blithe newcomer?"

The Mourning Dove may be called the poet of melancholy, for its song is, to us, without one element of cheerfulness. Hopeless despair is in every note, and, as the bird undoubtedly does have cheerful moods, as indicated by its actions, its song must be appreciated only by its mate. *Coo-o, coo-o!* suddenly thrown upon the air and resounding near and far is something hardly to be extolled, we should think, and yet the beautiful and graceful Dove possesses so many pretty ways that every one is attracted to it, and the tender affection of the mated pair is so manifest, and their constancy so conspicuous, that the name has become a symbol of domestic concord.

The Cuckoo must utter his note in order to be recognized, for few that are learned in bird lore can discriminate him save from his notes. He proclaims himself by calling forth his own name, so that it is impossible to make a mistake about him. Well, his note is an agreeable one and has made him famous. As he loses his song in the summer months, he is inclined to make good use of it when he finds it again. English boys are so skillful in imitating the Cuckoo's song, which they do to an exasperating extent, that the bird himself may often wish for that of the Nightingale, which is inimitable.

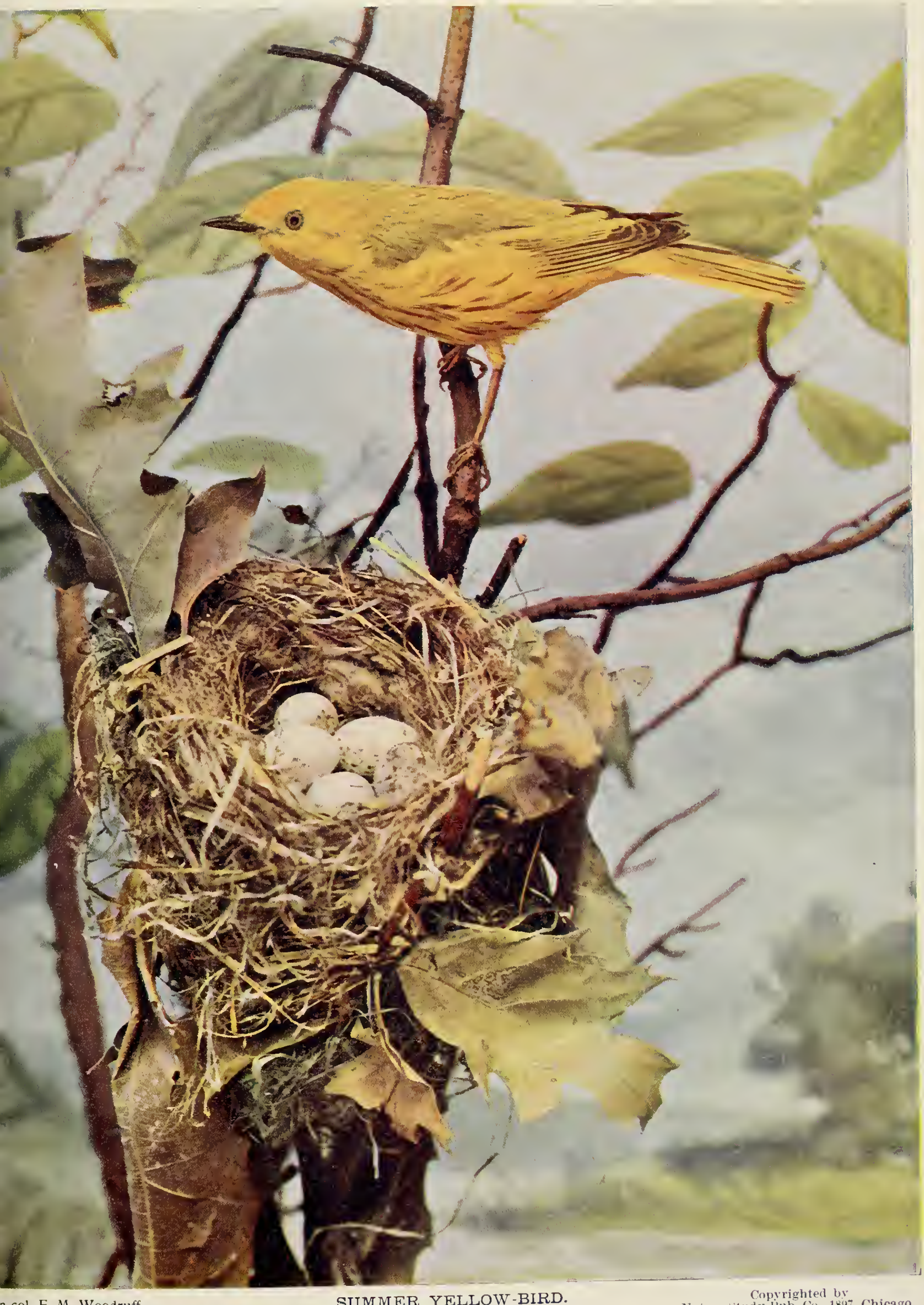
But the Cuckoo's song, monotonous as it is, is decidedly to be preferred to that of the female House Wren, with its *Chit-chit-chit-chit*, when suspicious or in anger. The male, however, is a real poet, let us say—and sings a merry roulade, sudden, abruptly ended, and frequently repeated. He sings, apparently, for the love of music, and is as merry and gay when his mate is absent as when she is at his side, proving that his singing is not solely for her benefit.

So good an authority as Dr. Coues vouches for the exquisite vocalization of the Ruby-crowned Kinglet. Have you ever heard a wire vibrating? Such is the call note of the Ruby, thin and metallic. But his song has a fullness, a variety, and a melody, which, being often heard in the spring migration, make this feathered beauty additionally attractive. Many of the fine songsters are not brilliantly attired, but this fellow has a combination of attractions to commend him as worthy of the bird student's careful attention.

Of the Hermit Thrush, whose song is celebrated, we will say only, "Read everything you can find about him." He will not be discovered easily, for even Olive Thorne Miller, who is presumed to know all about birds, tells of her pursuit of the Hermit in northern New York, where it was said to be abundant, and finding, when she looked for him, that he had always "been there" and was gone. But one day in August she saw the bird and heard the song and exclaimed: "This only was lacking—this crowns my summer."

The Song Sparrow can sing too, and the Phoebe, beloved of man, and the White-breasted Nuthatch, a little. They do not require the long-seeking of the Hermit Thrush, whose very name implies that he prefers to flock by himself, but can be seen in our parks throughout the season. But the Sparrow loves the companionship of man, and has often been a solace to him. It is stated by the biographer of Kant, the great metaphysician, that at the age of eighty he had become indifferent to much that was passing around him in which he had formerly taken great interest. The flowers showed their beautious hues to him in vain; his weary vision gave little heed to their loveliness; their perfume came unheeded to the sense which before had inhaled it with eagerness. The coming on of spring, which he had been accustomed to hail with delight, now gave him no joy save that it brought back a little Sparrow, which came annually and made its home in a tree that stood by his window. Year after year, as one generation went the way of all the earth, another would return to its birth-place to reward the tender care of their benefactor by singing to him their pleasant songs. And he longed for their return in the spring with "an eagerness and intensity of expectation."

How many provisions nature has for keeping us simple-hearted and child-like! The Song Sparrow is one of them. —C. C. Marble.



n col. F. M. Woodruff.

SUMMER YELLOW-BIRD.

3/5 Life-size.

Copyrighted by
Nature Study Pub. Co., 1897, Chicago.

THE YELLOW WARBLER.

IN a recent article Angus Gaines describes so delightfully some of the characteristics of the Yellow Warbler, or Summer Yellow bird, sometimes called the Wild Canary, that we are tempted to make use of part of it. "Back and forth across the garden the little yellow birds were flitting, dodging through currant and gooseberry bushes, hiding in the lilacs, swaying for an instant on swinging sprays of grape vines, and then flashing out across the garden beds like yellow sunbeams. They were lithe, slender, dainty little creatures, and were so quick in their movements that I could not recognize them at first, but when one of them hopped down before me, lifted a fallen leaf and dragged a cutworm from beneath it, and, turning his head, gave me a sidewise glance with his victim still struggling in his beak, I knew him. His gay coat was yellow without the black cap, wings, and tail which show in such marked contrast to the bright canary hue of that other yellow bird, the Gold-finch.

"Small and delicate as these birds are, they had been on a long journey to the southward to spend the winter, and now on the first of May, they had returned to their old home to find the land at its fairest—all blossoms, buds, balmy air, sunshine, and melody. As they flitted about in their restless way, they sang the soft, low, warbling trills, which gave them their name of Yellow Warbler."

Mrs. Wright says these beautiful birds come like whirling leaves, half autumn yellow, half green of spring, the colors blending as in the outer petals of grass-grown daffodils. "Lovable, cheerful little spirits, darting about the trees, exclaiming at each morsel that they glean. Carrying sun glints on their backs wherever they go, they should make the gloomiest misanthrope feel the season's charm. They are so sociable and confiding, feeling as much at home in the trees by the house as in seclusion."

The Yellow-bird builds in bushes, and the nest is a wonderful example of bird architecture. Milkweed, lint and its strips of fine bark are glued to twigs, and form the exterior of the nest. Its inner lining is made of the silky down on dandelion-balls woven together with horse-hair. In this dainty nest are laid four or five creamy white eggs, speckled with lilac tints and red-browns. The unwelcome egg of the Cow-bird is often found in the Yellow-bird's nest, but this Warbler builds a floor over the egg, repeating the expedient, if the Cow-bird continues her mischief, until sometimes a third story is erected.

A pair of Summer Yellow-birds, we are told, had built their nest in a wild rose bush, and were rearing their family in a wilderness of fragrant blossoms whose tinted petals dropped upon the dainty nest, or settled upon the back of the brooding mother. The birds, however, did not stay "to have their pictures taken," but their nest may be seen among the roses.

The Yellow Warbler's song is *Sweet-sweet-sweet-sweet-sweet-sweet-sweeter-sweeter:* seven times repeated.

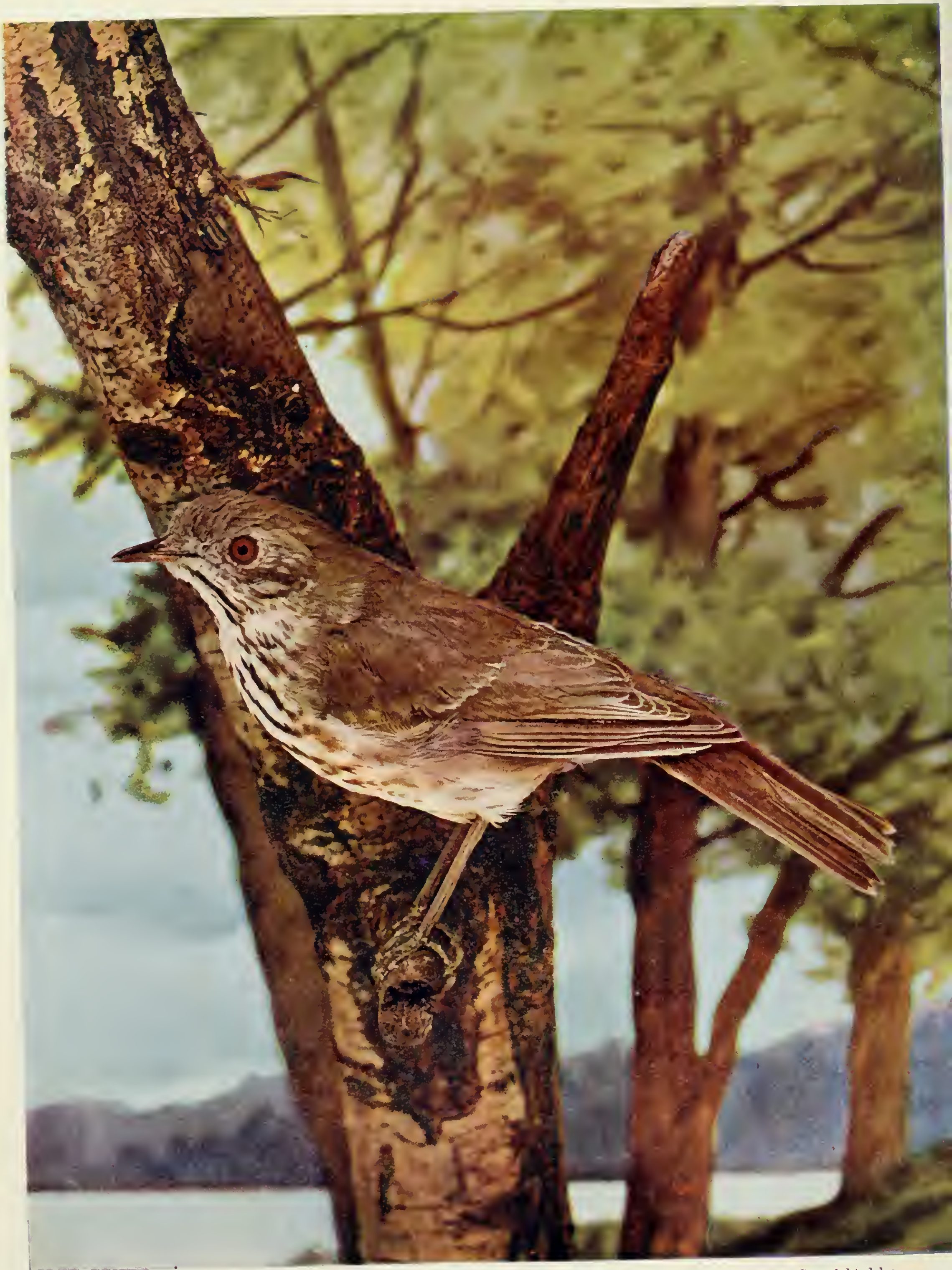
THE HERMIT THRUSH.

IN John Burroughs' "Birds and Poets" this master singer is described as the most melodious of our songsters, with the exception of the Wood Thrush, a bird whose strains, more than any other's, express harmony and serenity, and he complains that no merited poetic monument has yet been reared to it. But there can be no good reason for complaining of the absence of appreciative prose concerning the Hermit. One writer says: "How pleasantly his notes greet the ear amid the shrieking of the wind and the driving snow, or when in a calm and lucid interval of genial weather we hear him sing, if possible, more richly than before. His song reminds us of a coming season when the now dreary landscape will be clothed in a blooming garb befitting the vernal year—of the song of the Blackbird and Lark, and hosts of other tuneful throats which usher in that lovely season. Should you disturb him when singing he usually drops down and awaits your departure, though sometimes he merely retires to a neighboring tree and warbles as sweetly as before."

In "Birdcraft" Mrs. Wright tells us, better than any one else, the story of the Hermit. She says: "This spring, the first week in May, when standing at the window about six o'clock in the morning, I heard an unusual note, and listened, thinking it at first a Wood Thrush and then a Thrasher, but soon finding that it was neither of these I opened the window softly and looked among the near by shrubs, with my glass. The wonderful melody ascended gradually in the scale as it progressed, now trilling, now legato, the most perfect, exalted, unrestrained, yet withal, finished bird song that I ever heard. At the first note I caught sight of the singer perching among the lower sprays of a dogwood tree. I could see him perfectly: it was the Hermit Thrush. In a moment he began again. I have never heard the Nightingale, but those who have say that it is the surroundings and its continuous night singing that make it even the equal of our Hermit; for, while the Nightingales sing in numbers in the moonlit groves, the Hermit tunes his lute sometimes in inaccessible solitudes, and there is something immaterial and immortal about the song."

The Hermit Thrush is comparatively common in the northeast, and in Pennsylvania it is, with the exception of the Robin, the commonest of the Thrushes. In the eastern, as in many of the middle states, it is only a migrant. It is usually regarded as a shy bird. It is a species of more general distribution than any of the small Thrushes, being found entirely across the continent and north to the Arctic regions. It is not quite the same bird, however, in all parts of its range, the Rocky Mountain region being occupied by a larger, grayer race, while on the Pacific coast a dwarf race takes its place. It is known in parts of New England as the "Ground Swamp Robin," and in other localities as "Swamp Angel."

True lovers of nature find a certain spiritual satisfaction in the song of this bird. "In the evening twilight of a June day," says one of these, "when all nature seemed resting in quiet, the liquid, melting, lingering notes of the solitary bird would steal out upon the air and move us strangely. What was the feeling it awoke in our hearts? Was it sorrow or joy, fear or hope, memory or expectation? And while we listened, we thought the meaning of it all was coming; it was trembling on the air, and in an instant it would reach us. Then it faded, it was gone, and we could not even remember what it had been."



From col. F. M. Woodruff.

HERMIT THRUSH.
$^3/_5$ Life-size.

Copyrighted by
Nature Study Pub. Co., 1897, Chicag

THE HERMIT THRUSH.

I am sorry, children, that I cannot give you a specimen of my song as an introduction to the short story of my life. One writer about my family says it is like this: "O spheral, spheral! O holy, holy! O clear away, clear away! O clear up, clear up!" as if I were talking to the weather. May be my notes do sound something like that, but I prefer you should hear me sing when I am alone in the woods, and other birds are silent. It is ever being said of me that I am as fine a singer as the English Nightingale. I wish I could hear this rival of mine, and while I have no doubt his voice is a sweet one, and I am not too vain of my own, I should like to "compare notes" with him. Why do not some of you children ask your parents to invite a few pairs of Nightingales to come and settle here? They would like our climate, and would, I am sure, be welcomed by all the birds with a warmth not accorded the English Sparrow, who has taken possession and, in spite of my love for secret hiding places, will not let even me alone.

When you are older, children, you can read all about me in another part of Birds. I will merely tell you here that I live with you only from May to October, coming and going away in company with the other Thrushes, though I keep pretty well to myself while here, and while building my nest and bringing up my little ones I hide myself from the face of man, although I do not fear his presence. That is why I am called the Hermit.

If you wish to know in what way I am unlike my cousin Thrushes in appearance, turn to pages 84 and 182, Vol. 1, of Birds. There you will see their pictures. I am one of the smallest of the family, too. Some call me "the brown bird with the rusty tail," and other names have been fitted to me, as Ground Gleaner, Tree Trapper, and Seed Sower. But I do not like nicknames, and am just plain,

Hermit Thrush.

THE SONG SPARROW.

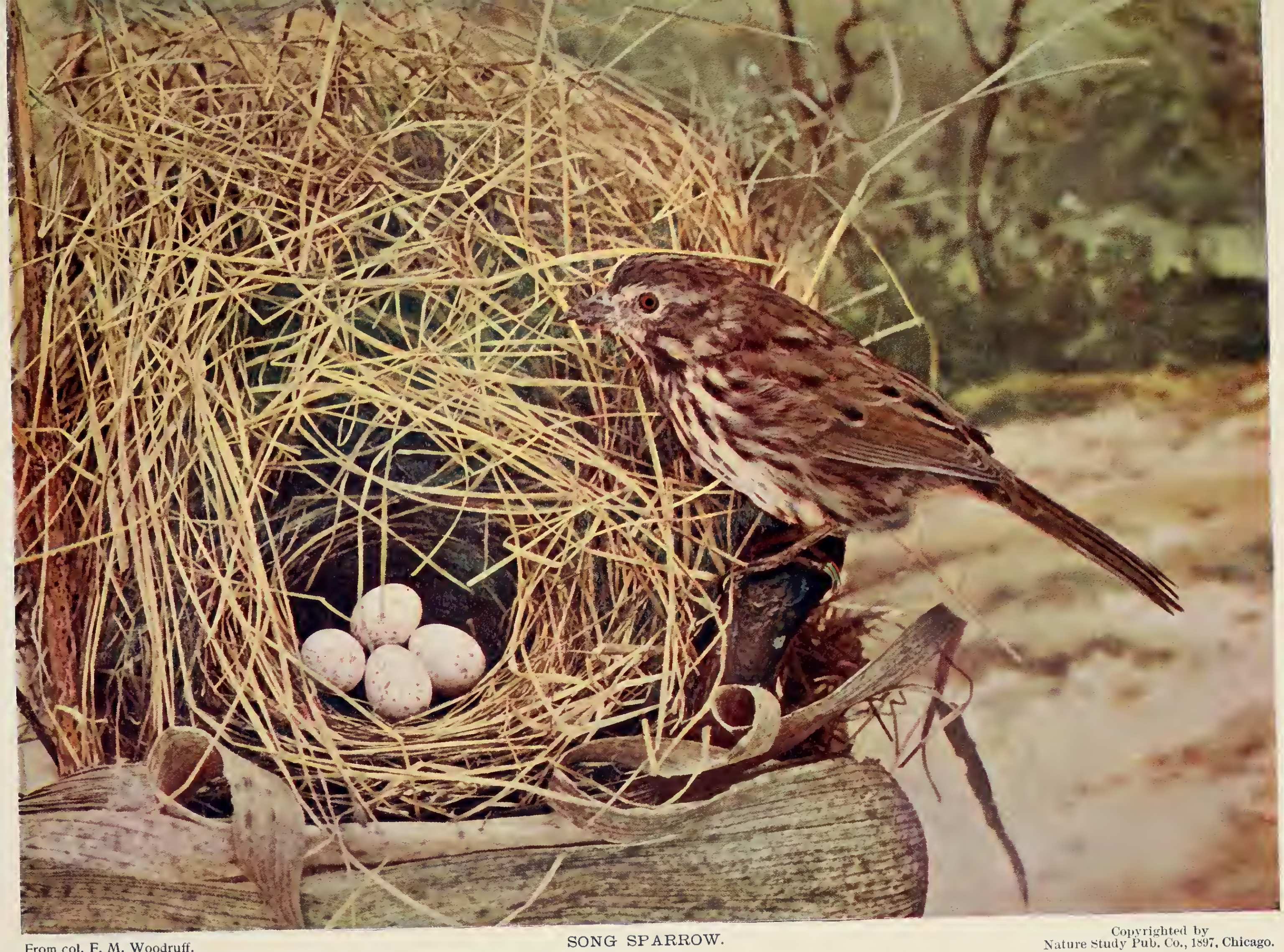
Glimmers gay the leafless thicket
Close beside my garden gate,
Where, so light, from post to wicket,
Hops the Sparrow, blithe, sedate;
Who, with meekly folded wing,
Comes to sun himself and sing.

It was there, perhaps, last year,
That his little house he built;
For he seemed to perk and peer
And to twitter, too, and tilt
The bare branches in between,
With a fond, familiar mien.
—George Parsons Lathrop.

WE do not think it at all amiss to say that this darling among song birds can be heard singing nearly everywhere the whole year round, although he is supposed to come in March and leave us in November. We have heard him in February, when his little feet made tracks in the newly fallen snow, singing as cheerily as in April, May, and June, when he is supposed to be in ecstacy. Even in August, when the heat of the dog-days and his molting time drive him to leafy seclusion, his liquid notes may be listened for with certainty, while "all through October they sound clearly above the rustling leaves, and some morning he comes to the dog-wood by the arbor and announces the first frost in a song that is more direct than that in which he told of spring. While the chestnuts fall from their velvet nests, he is singing in the hedge; but when the brush heaps burn away to fragrant smoke in November, they veil his song a little, but it still continues."

While the Song Sparrow nests in the extreme northern part of Illinois, it is known in the more southern portions only as a winter resident. This is somewhat remarkable, it is thought, since along the Atlantic coast it is one of the most abundant summer residents throughout Maryland and Virginia, in the same latitudes as southern Illinois, where it is a winter sojourner, abundant, but very retiring, inhabiting almost solely the bushy swamps in the bottom lands, and unknown as a song bird. This is regarded as a remarkable instance of variation in habits with locality, since in the Atlantic states it breeds abundantly, and is besides one of the most familiar of the native birds.

The location of the Song Sparrow's nest is variable; sometimes on the ground, or in a low bush, but usually in as secluded a place as its instinct of preservation enables it to find. A favorite spot is a deep shaded ravine through which a rivulet ripples, where the solitude is disturbed only by the notes of his song, made more sweet and clear by the prevailing silence.



From col. F. M. Woodruff.

SONG SPARROW.
$4/5$ Life-size.

Copyrighted by
Nature Study Pub. Co., 1897, Chicago.

THE SONG SPARROW.

Dear Young Readers:

I fancy many of the little folks who are readers of Birds are among my acquaintances. Though I have never spoken to you, I have seen your eyes brighten when my limpid little song has been borne to you by a passing breeze which made known my presence. Once I saw a pale, worn face turn to look at me from a window, a smile of pleasure lighting it up. And I too was pleased to think that I had given some one a moment's happiness. I have seen bird lovers (for we have lovers, and many of them) pause on the highway and listen to my pretty notes, which I know as well as any one have a cheerful and patient sound, and which all the world likes, for to be cheered and encouraged along the pathway of life is like a pleasant medicine to my weary and discouraged fellow citizens. For you must know I am a citizen, as my friend Dr. Coues calls me, and all my relatives. He and Mrs. Mabel Osgood Wright have written a book about us called "Citizen Bird," and in it they have supported us in all our rights, which even you children are beginning to admit we have. You are kinder to us than you used to be. Some of you come quickly to our rescue from untaught and thoughtless boys who, we think, if they were made to know how sensitive we are to suffering and wrong, would turn to be our friends and protectors instead. One dear boy I remember well (and he is considered a hero by the Song Sparrows) saved a nest of our birdies from a cruel school boy robber. Why should not all strong boys become our champions? Many of them have great, honest, sympathetic hearts in their bosoms, and, if we can only enlist them in our favor, they can give us a peace and protection for which for years we have been sighing. Yes, sighing, because our hearts, though little, are none the less susceptible to all the asperities—the terrible asperities of human nature. Papa will tell you what I mean: you would not understand bird language.

Did you ever see my nest? I build it near the ground, and sometimes, when kind friends prepare a little box for me, I occupy it. My song is quite varied, but you will always recognize me by my call note, *Chek! Chek! Chek!* Some people say they hear me repeat "Maids, maids, maids, hang on your teakettle," but I think this is only fancy, for I can sing a real song, admired, I am sure, by all who love

Song Sparrow.

THE CUCKOO.

OUR first introduction to the Cuckoo was by means of the apparition which issued hourly from a little German clock, such as are frequently found in country inns. This particular clock had but one dial hand, and the exact time of day could not be determined by it until the appearance of the Cuckoo, who, in a squeaking voice, seemed to announce that it was just one hour later or earlier, as the case might be, than at his last appearance. We were puzzled, and remember fancying that a sun dial, in clear weather, would be far more satisfactory as a time piece. "Coo-coo," the image repeated, and then retired until the hour hand should summon him once more.

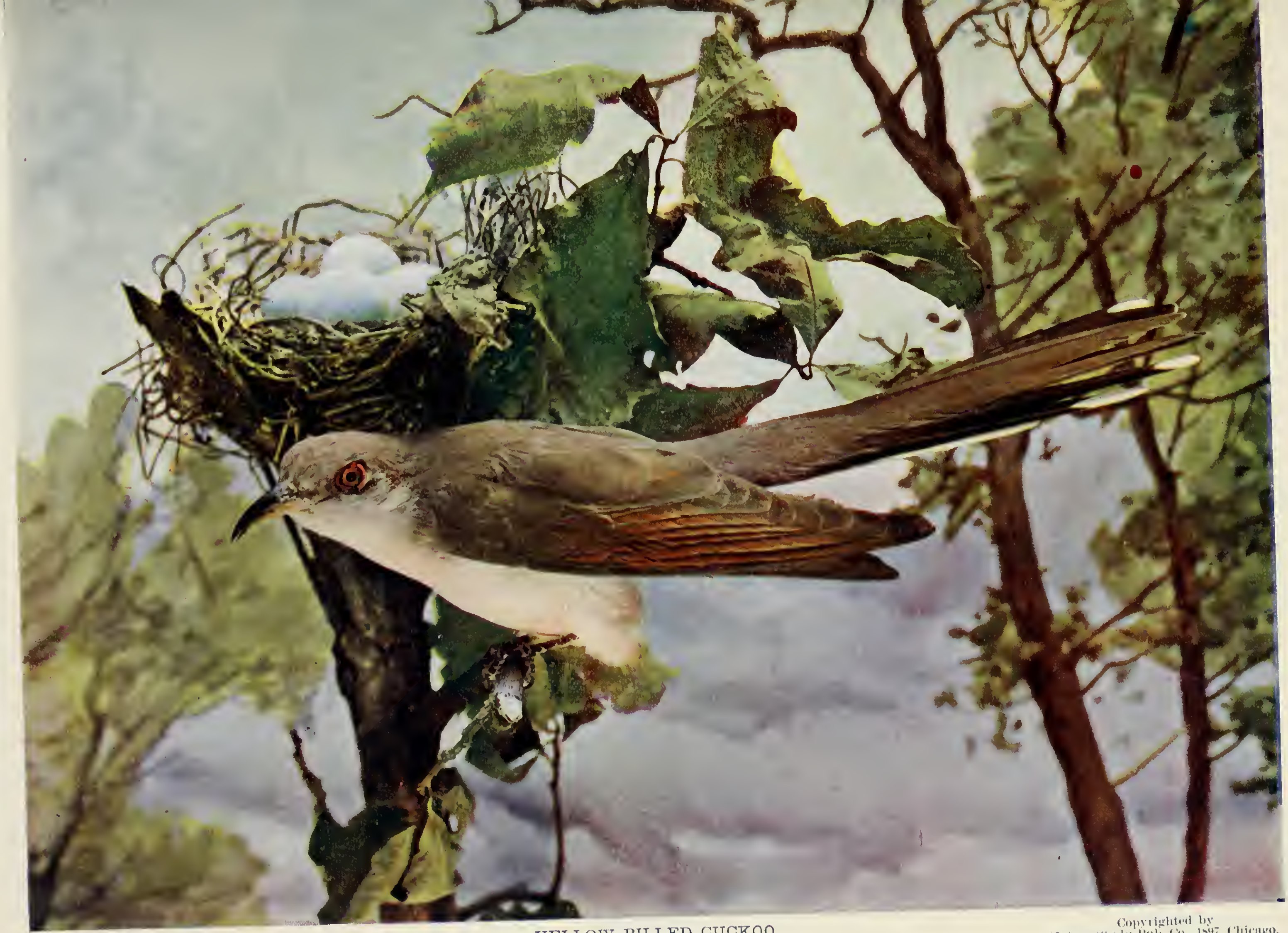
To very few people, not students of birds, is the Cuckoo really known. Its evanescent voice is often recognized, but being a solitary wanderer even ornithologists have yet to learn much of its life history. In their habits the American and European Cuckoos are so similar that whatever of poetry and sentiment has been written of them is applicable alike to either. A delightful account of the species may be found in Dixon's Bird Life, a book of refreshing and original observation.

"The Cuckoo is found in the verdant woods, in the coppice, and even on the lonely moors. He flits from one stunted tree to another and utters his notes in company with the wild song of the Ring Ousel and the harsh calls of the Grouse and Plover. Though his notes are monotonous, still no one gives them this appellation. No! this little wanderer is held too dear by us all as the harbinger of spring for aught but praise to be bestowed on his mellow notes, which, though full and soft, are powerful, and may on a calm morning, before the every-day hum of human toil begins, be heard a mile away, over wood, field, and lake. Toward the summer solstice his notes are on the wane, and when he gives them forth we often hear him utter them as if laboring under great difficulty, and resembling the syllables, "*Coo-coo-coo-coo.*"

On one occasion Dixon says he heard a Cuckoo calling in treble notes, *Cuck-oo-oo*, *cuck-oo-oo*, inexpressibly soft and beautiful, notably the latter one. He at first supposed an echo was the cause of these strange notes, the bird being then half a mile away, but he satisfied himself that this was not the case, as the bird came and alighted on a noble oak a few yards from him and repeated the notes. The Cuckoo utters his notes as he flies, but only, as a rule, when a few yards from the place on which he intends alighting.

The opinion is held by some observers that Nature has not intended the Cuckoo to build a nest, but influences it to lay its eggs in the nests of other birds, and intrust its young to the care of those species best adapted to bring them to maturity. But the American species does build a nest, and rears its young, though Audubon gives it a bad character, saying: "It robs smaller birds of their eggs." It does not deserve the censure it has received, however, and it is useful in many ways. Its hatred of the worm is intense, destroying many more than it can eat. So thoroughly does it do its work, that orchards, which three years ago, were almost leafless, the trunks even being covered by slippery webbing, are again yielding a good crop.

In September and October the Cuckoo is silent and suddenly disappears. "He seldom sees the lovely tints of autumn, and never hears the wintry storm-winds' voice, for, impelled by a resistless impulse, he wings his way afar over mountain, stream, and sea, to a land where northern blasts are not felt, and where a summer sun is shining in a cloudless sky."



From col. O. E. Pagin.

YELLOW-BILLED CUCKOO.
½ Life-size.

Copyrighted by
Nature Study Pub. Co., 1897, Chicago.

THE RUBY-THROATED HUMMING BIRD.

Is it a gem, half bird,
Or is it a bird, half gem?
—EDGAR FAWCETT.

OF all animated beings this is the most elegant in form and the most brilliant in colors, says the great naturalist Buffon. The stones and metals polished by our arts are not comparable to this jewel of Nature. She has it least in size of the order of birds, *maxime miranda in minimis.* Her masterpiece is the Humming-bird, and upon it she has heaped all the gifts which the other birds may only share. Lightness, rapidity, nimbleness, grace, and rich apparel all belong to this little favorite. The emerald, the ruby, and the topaz gleam upon its dress. It never soils them with the dust of earth, and its aerial life scarcely touches the turf an instant. Always in the air, flying from flower to flower, it has their freshness as well as their brightness. It lives upon their nectar, and dwells only in the climates where they perennially bloom.

All kinds of Humming-birds are found in the hottest countries of the New World. They are quite numerous and seem to be confined between the two tropics, for those which penetrate the temperate zones in summer stay there only a short time. They seem to follow the sun in its advance and retreat; and to fly on the zephyr wing after an eternal spring.

The smaller species of the Humming-birds are less in size than the great fly wasp, and more slender than the drone. Their beak is a fine needle and their tongue a slender thread. Their little black eyes are like two shining points, and the feathers of their wings so delicate that they seem transparent. Their short feet, which they use very little, are so tiny one can scarcely see them. They rarely alight during the day. They have a swift continual humming flight. The movement of their wings is so rapid that when pausing in the air, the bird seems quite motionless. One sees him stop before a blossom, then dart like a flash to another, visiting all, plunging his tongue into their hearts, flattening them with his wings, never settling anywhere, but neglecting none. He hastens his inconstancies only to pursue his loves more eagerly and to multiply his innocent joys. For this light lover of flowers lives at their expense without ever blighting them. He only pumps their honey, and for this alone his tongue seems designed.

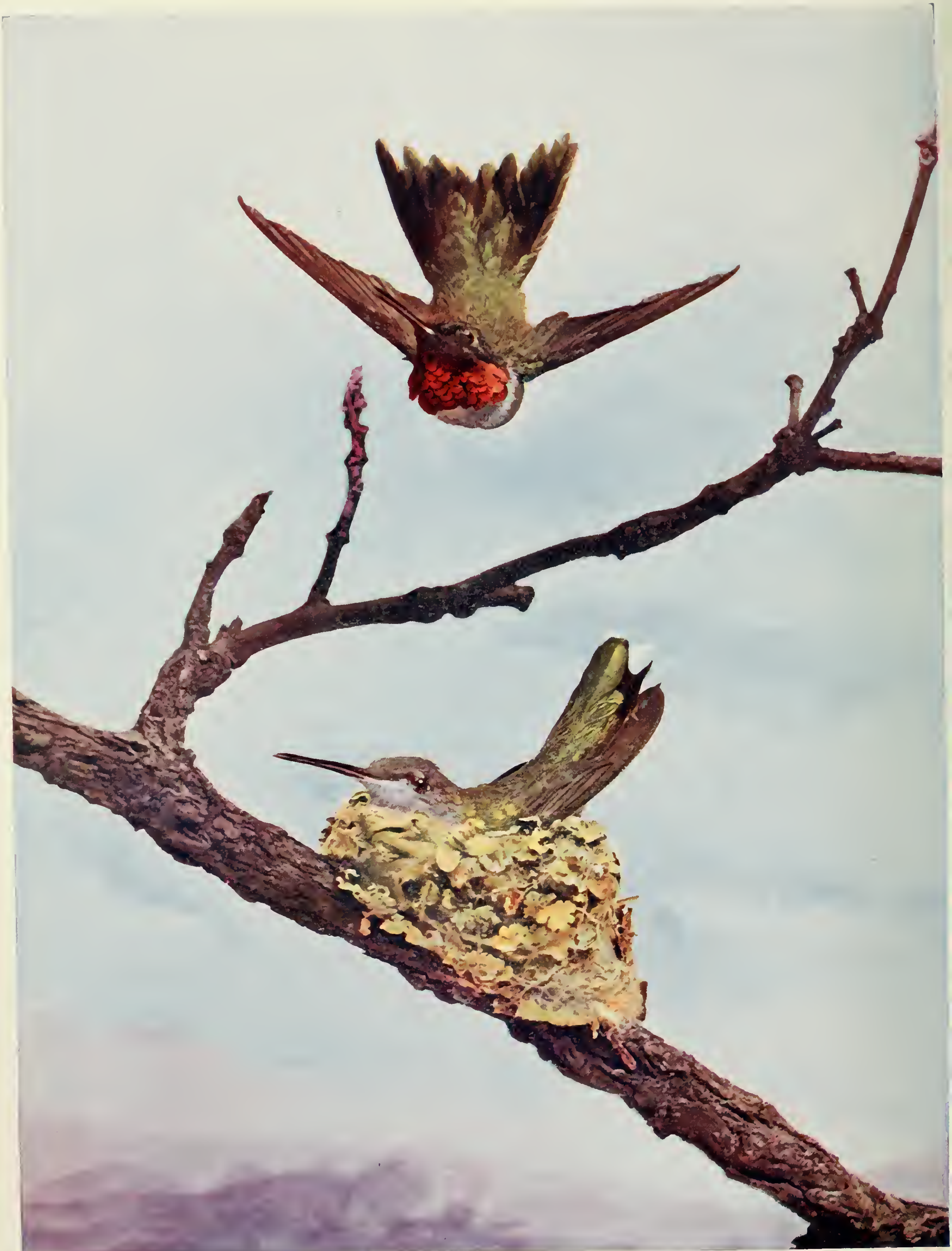
The vivacity of these small birds is only equaled by their courage, or rather their audacity. Sometimes they may be seen furiously chasing birds twenty times their size, fastening upon their bodies, letting themselves be carried along in their flight, while they peck fiercely until their tiny rage is satisfied. Sometimes they fight each other vigorously. Impatience seems their very essence. If they approach a blossom and find it faded, they mark their spite by a hasty rending of the petals. Their only voice is a weak cry of *Screp, screp,* frequent and repeated, which they utter in the woods from dawn until at the first rays of the sun they all take flight and scatter over the country.

The Ruby-throat is the only native Humming-bird of eastern North America, where it is a common summer resident from May to October, breeding from Florida to Labrador. The nest is a circle an inch and a half in diameter, made of fern wood, plant down, and so forth, shingled with lichens to match the color of the branch on which it rests. Its only note is a shrill, mouse-like squeak.

THE HOUSE WREN.

All the children, it seems to me, are familiar with the habits of Johnny and Jenny Wren; and many of them, especially such as have had some experience with country life, could themselves tell a story of these mites of birds. Mr. F. Saunders tells one: "Perhaps you may think the Wren is so small a bird he cannot sing much of a song, but he can. The way we first began to notice him was by seeing our pet cat jumping about the yard, dodging first one way and then another, then darting up a tree; looking surprised, and disappointingly jumping down again.

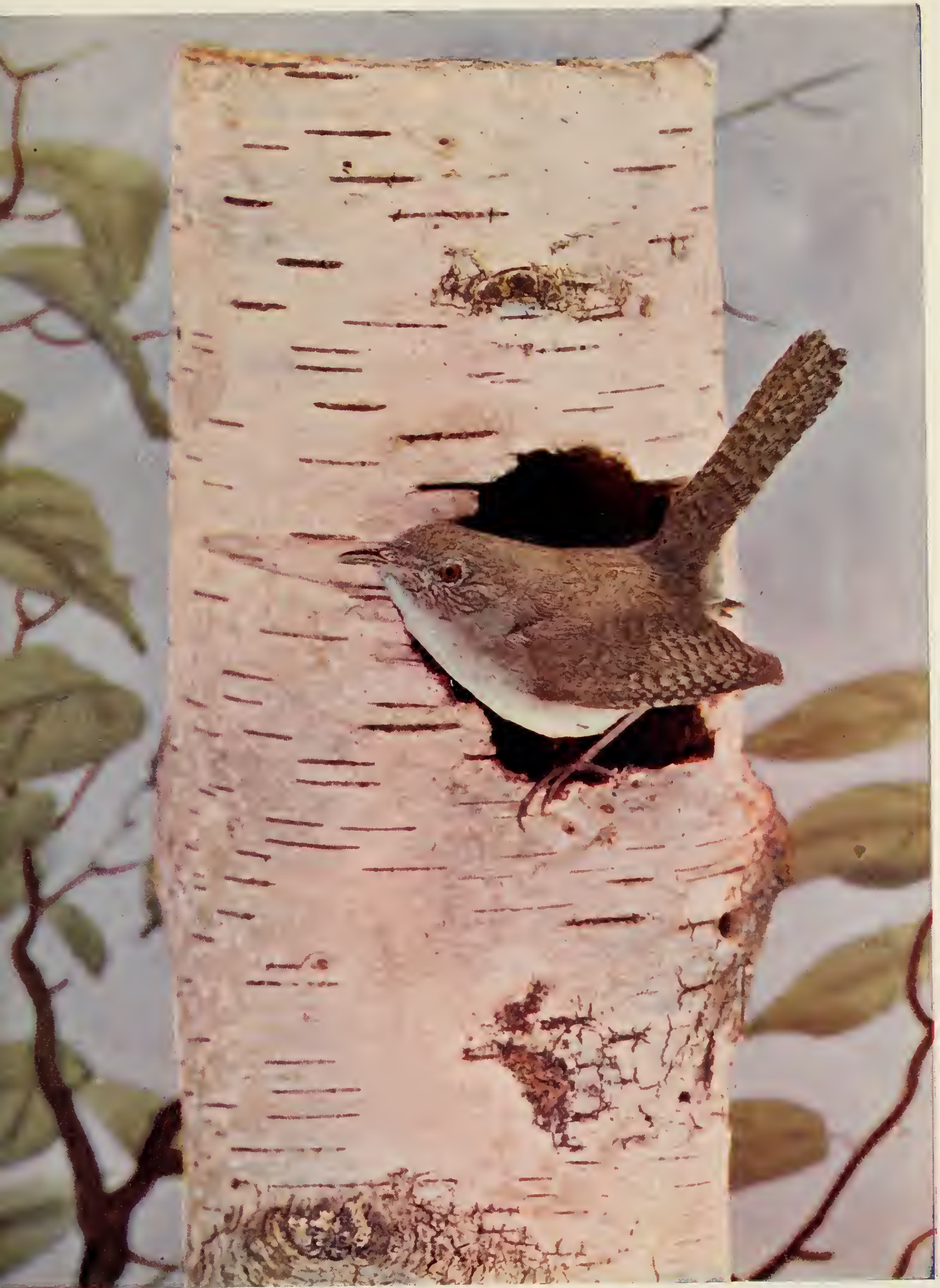
"Pussy had found a new play-mate, for the little Wren evidently thought it great fun to fly down just in front of her and dart away before she could reach him, leading her from one spot to another, hovering above her head, chattering to her all the time, and at last flying up far out of her reach. This he repeated day after day, for some time, seeming to enjoy the fun of disappointing her so nicely and easily. But after a while the little fellow thought he would like a play-mate nearer his own size, and went off to find one. But he came back all alone, and perched himself on the very tip-top of a lightning-rod on a high barn at the back of the yard; and there he would sing his sweet little trilling song, hour after hour, hardly stopping long enough to find food for his meals. We wondered that he did not grow tired of it. For about a week we watched him closely, and one day I came running into the house to tell the rest of the family with surprise and delight that our little Wren knew what he was about, for with his winning song he had called a mate to him. He led her to the tree where he had played with pussy, and they began building a nest; but pussy watched then as well as we, and meant to have her revenge upon him yet, so she sprang into the tree, tore the nest to pieces, and tried to catch Jenny. The birds rebuilt their nest three times, and finally we came to their rescue and placed a box in a safe place under the eves of the house, and Mr. Wren with his keen, shrewd eyes, soon saw and appropriated it. There they stayed and raised a pretty family of birdies; and I hope he taught them, as he did me, a lesson in perseverence I'll never forget."



From col. F. M. Woodruff.

RUBY-THROATED HUMMING BIRDS.
Life-size.

Copyrighted by
Nature Study Pub. Co., 1897, Chicago.



rom col. F. M. Woodruff.

HOUSE WREN.
Life-size.

Copyrighted by
Nature Study Pub. Co., 1897, Chicago.

THE RUBY-THROATED HUMMING BIRD.

Dear Young Folks:

I fancy you think I cannot stop long enough to tell you a story, even about myself. It is true, I am always busy with the flowers, drinking their honey with my long bill, as you must be busy with your books, if you would learn what they teach. I always select for my food the sweetest flowers that grow in the garden.

Do you think you would be vain if you had my beautiful colors to wear? Of course, you would not, but so many of my brothers and sisters have been destroyed to adorn the bonnets and headdresses of the thoughtless that the children cannot be too early taught to love us too well to do us harm. Have you ever seen a ruby? It is one of the most valued of gems. It is the color of my throat, and from its rare and brilliant beauty I get a part of my name. The ruby is worn by great ladies and, with the emerald and topaz, whose bright colors I also wear, is much esteemed as an ornament.

If you will come into the garden in the late afternoon, between six and seven o'clock, when I am taking my supper, and when the sun is beginning to close his great eye, you will see his rays shoot sidewise and show all the splendor of my plumage. You will see me, too, if your eyes are sharp enough, draw up my tiny claws, pause in front of a rose, and remain seemingly motionless. But listen, and you will hear the reason for my name—a tense humming sound. Some call me a Hummer indeed.

I spend only half the year in the garden, coming in May and saying farewell in October. After my mate and I are gone you may find our nest. But your eyes will be sharp indeed if they detect it when the leaves are on the trees, it is so small and blends with the branches. We use fern-wool and soft down to build it, and shingle it with lichens to match the branch it nests upon. You should see the tiny eggs of pure white. But we, our nest and our eggs, are so dainty and delicate that they should never be touched. We are only to be looked at and admired.

Farewell. Look for me when you go a-Maying. Ruby.

THE HOUSE WREN.

"It was a merry time
  When Jenny Wren was young,
When prettily she looked,
  And sweetly, too, she sung."

"IN looking over an old memorandum book the other day," says Col. S. T. Walker, of Florida, "I came across the following notes concerning the nesting of the House Wren. I was sick at the time, and watched the whole proceeding, from the laying of the first stick to the conclusion. The nest was placed in one of the pigeonholes of my desk, and the birds effected an entrance to the room through sundry cracks in the log cabin.

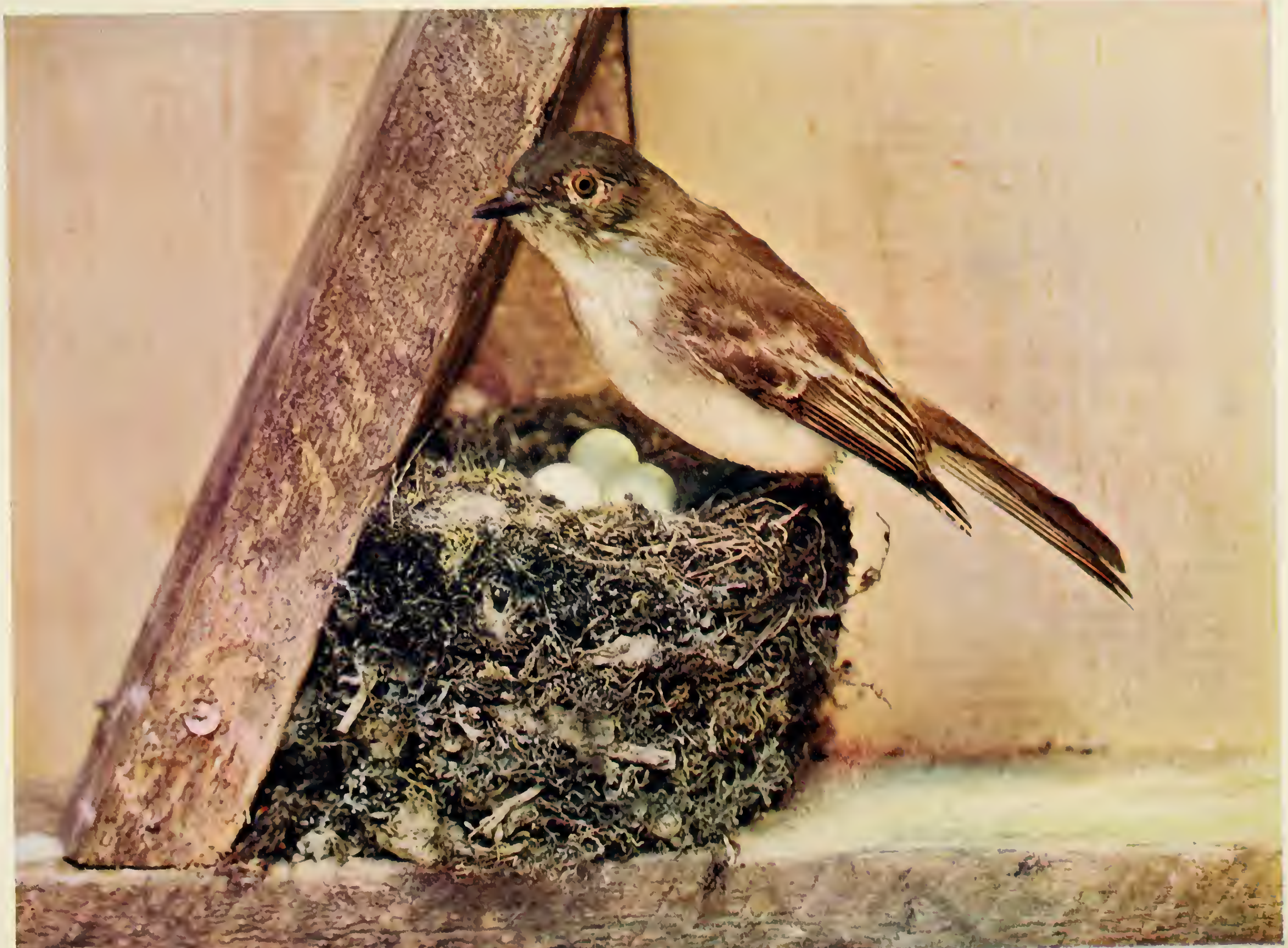
Nest begun	April 15th.
Nest completed and first egg laid,	April 27.
Last egg laid	May 3rd.
Began sitting	May 4th.
Hatching completed	May 18th.
Young began to fly	May 27th.
Young left the nest	June 1st.
Total time occupied	47 days.

Such is the usual time required for bringing forth a brood of this species of Wren, which is the best known of the family. In the Atlantic states it is more numerous than in the far west, where wooded localities are its chosen haunts, and where it is equally at home in the cottonwoods of the river valleys, and on the aspens just below the timber line on lofty mountains.

Mrs. Osgood Wright says very quaintly that the House Wren is a bird who has allowed the word *male* to be obliterated from its *social* constitution at least: that we always speak of Jenny Wren: always refer to the Wren as *she*, as we do of a ship. That it is Johnny Wren who sings and disports himself generally, but it is Jenny, who, by dint of much scolding and fussing, keeps herself well to the front. She chooses the building-site and settles all the little domestic details. If Johnny does not like her choice, he may go away and stay away; she will remain where she has taken up her abode and make a second matrimonial venture.

The House Wren's song is a merry one, sudden, abrubtly ended, and frequently repeated. It is heard from the middle of April to October, and upon the bird's arrival it at once sets about preparing its nest, a loose heap of sticks with a soft lining, in holes, boxes, and the like. From six to ten tiny, cream-colored eggs are laid, so thickly spotted with brown that the whole egg is tinged.

The House Wren is not only one of our most interesting and familiar neighbors, but it is useful as an exterminator of insects, upon which it feeds. Frequently it seizes small butterflies when on the wing. We have in mind a sick child whose convalescence was hastened and cheered by the near-by presence of the merry House Wren, which sings its sweet little trilling song, hour after hour, hardly stopping long enough to find food for its meals.



Copyrighted by

THE PHOEBE.

Oft the Phoebe's cheery notes
Wake the laboring swain;
"Come, come!" say the merry throats,
"Morn is here again."
Phoebe, Phoebe! let them sing for aye,
Calling him to labor at the break of day.
—C. C. M.

NEARLY everywhere in the United States we find this cheerful bird, known as Pewee, Barn Pewee, Bridge Pewee, or Phoebe, or Pewit Flycatcher. "It is one of that charming coterie of the feathered tribe who cheer the abode of man with their presence." There are few farmyards without a pair of Pewees, who do the farmer much service by lessening the number of flies about the barn, and by calling him to his work in the morning by their cheery notes.

Dr. Brewer says that this species is attracted both to the vicinity of water and to the neighborhood of dwellings, probably for the same reason—the abundance of insects in either situation. They are a familiar, confiding, and gentle bird, attached to localities, and returning to them year after year. Their nests are found in sheltered situations, as under a bridge, a projecting rock, in the porches of houses, etc. They have been known to build on a small shelf in the porch of a dwelling, against the wall of a railroad station, within reach of the passengers, and under a projecting window-sill, in full view of the family, entirely unmoved by the presence of the latter at meal time.

Like all the flycatcher family the Phoebe takes its food mostly flying. Mrs. Wright says that the Pewee in his primitive state haunts dim woods and running water, and that when domesticated he is a great bather, and may be seen in the half-light dashing in and out of the water as he makes trips to and from the nest. After the young are hatched both old and young disport themselves about the water until moulting time. She advises: "Do not let the Phoebes build under the hoods of your windows, for their spongy nests harbor innumerable bird-lice, and under such circumstances your fly-screens will become infested and the house invaded."

In its native woods the nest is of moss, mud, and grass placed on a rock, near and over running water; but in the vicinity of settlements and villages it is built on a horizontal bridge beam, or on timber supporting a porch or shed. The eggs are pure white, somewhat spotted. The notes, to some ears, are *Phoebe, phoebe, pewit, phoebe!* to others, of somewhat duller sense of hearing, perhaps, *Pewee, pewee, pewee!* We confess to a fancy that the latter is the better imitation.

THE RUBY-CROWNED KINGLET.

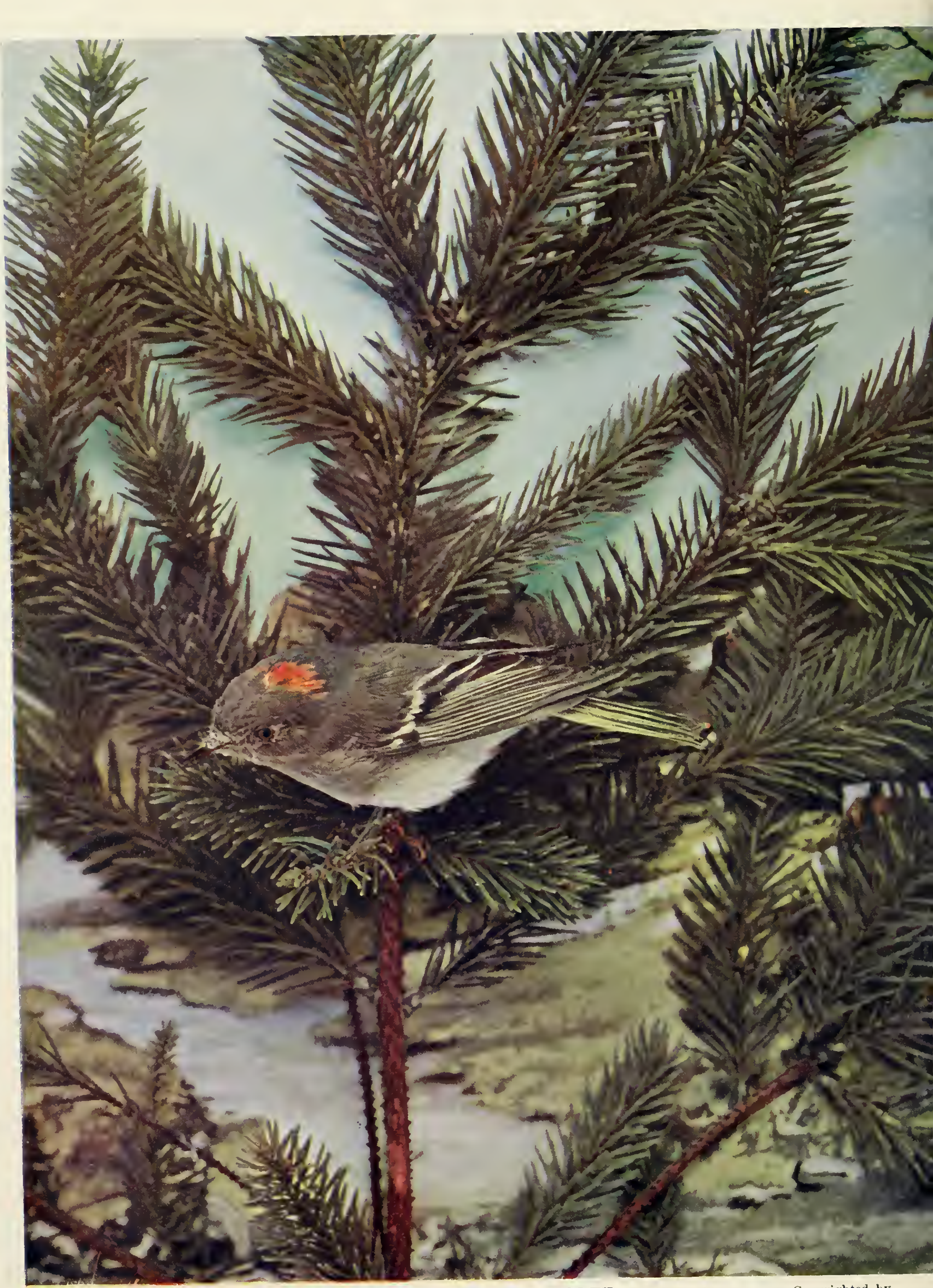
BASKETT says that the Kinglets come at a certain early spring date before the leaves are fully expanded, and flutter upward, while they take something from beneath the budding leaf or twig. It is a peculiar motion, which with their restless ways, olive-green color, and small size, readily distinguishes them. It is rare that one is still. "But the ruby-crowned sometimes favors me with a song, and as it is a little long, he usually is quiet till done. It is one of the sweetest little lullaby-like strains. One day I saw him in the rose bush just near voluntarily expand the plumage of his crown and show the brilliant golden-ruby feathers beneath. Usually they are mostly concealed. It was a rare treat, and visible to me only because of my rather exalted view. He generally reserves this display for his mate, but he was here among some Snow-birds and Tree Sparrows, and seemed to be trying to make these plain folks envious of the pretty feathers in his hat."

These wonderfully dainty little birds are of great value to the farmer and the fruit grower, doing good work among all classes of fruit trees by killing grubs and larvae. In spite of their value in this respect, they have been, in common with many other attractive birds, recklessly killed for millinery purposes.

It is curious to see these busy wanderers, who are always cheery and sociable, come prying and peering about the fruit trees, examining every little nook of possible concealment with the greatest interest. They do not stay long after November, and return again in April.

The nest of this Kinglet is rarely seen. It is of matted hair, feathers, moss, etc., bulky, round, and partly hanging. Until recently the eggs were unknown. They are of a dirty cream-white, deepening at larger end to form a ring, some specimens being spotted.

Mr. Nehrling, who has heard this Kinglet sing in central Wisconsin and northern Illinois, speaks of the "power, purity, and volume of the notes, their faultless modulation and long continuance," and Dr. Elliott Coues says of it: "The Kinglet's exquisite vocalization defies description." Dr. Brewer says that its song is clear, resonant, and high, a prolonged series, varying from the lowest tones to the highest, and terminating with the latter. It may be heard at quite a distance, and in some respects bears more resemblance to the song of the English Sky-lark than to that of the Canary, to which Mr. Audubon compares it.



From col. F. M. Woodruff.

RUBY-CROWNED KINGLET.
Life-size.

Copyrighted by
Nature Study Pub. Co., 1897, Chic

THE MOURNING DOVE.

THE DOVE AND THE STRANGER.

Stranger—Why mourning there so sad, thou gentle dove?
Dove— I mourn, unceasing mourn, my vanished love.
Stranger—What, has thy love then fled, or faithless proved?
Dove— Ah no! the sportsman wounded him I loved!
Stranger—Unhappy one! beware! that sportman's nigh!
Dove— Oh, let him come—or else of grief I die.—FROM THE RUSSIAN.

THROUGHOUT the State of Illinois and adjacent states this bird of sad refrain is a permanent resident, though less numerous and of uncertain occurrence in winter. In the spring of 1883, all the specimens seen at Wheatland, Indiana, had the ends of the toes frozen off, showing that they had braved the almost unprecedented cold of the preceding winter. They have been known to winter as far north as Canada, and in December considerable numbers have been seen about Windsor, Ontario.

The female is a little smaller than the male, and the young are duller and more brownish in color. In many places the Mourning Dove becomes half domesticated, nesting in the trees in the yard, showing but little fear when approached. While the Turtle Dove keeps the deepest woodland solitudes, and rarely seeks the fields and open places, this Dove is as often seen out of the woods as in them, for the greater part of the year at least; and, though a wary bird, it is not what we can call a shy one.

The love note of the Mourning Dove, though somewhat monotonous, "sounds particularly soothing and pleasant as we wander through the otherwise almost silent woods, just as they are about to don their leafy vestures, under the gentle influence of an April sun." If the birds be abundant, their low and plaintive note, *Coo-oo-oo, coo-oo-oo,* fills the entire forest with its murmur. Gentle, indeed, as the Dove is thought to be, still this does not hold good in the mating season, for two male birds will often fight with fury for the possession of a female. These encounters, however, are only between young or single birds.

If unmolested, these birds will nest in one certain locality for years. Mrs. Wright says the female is a most prettily shiftless house-wife. "Even though her mate should decline to furnish her with more liberal supply of sticks, she could arrange those she has to better advantage; but she evidently lacks that indispensable something, called *faculty*, which must be inborn. The eggs or bodies of the young show plainly through the rude platform and bid fair to either fall through it or roll out, but they seldom do. Meanwhile she coos regretfully, but does not see her way to bettering things, saying 'I know I'm a poor house-keeper, but it runs in our family;' but when the Dove chooses a flattened out Robin's nest for a platform, the nestlings fare very well."

The Dove's food is confined mainly to vegetable matter, peas, beans, lintels, grains, and small seeds of various kinds. They frequent newly sown land and feed upon the seed grain; they search under the oak trees for acorns, and under beech trees for mast, sometimes feeding in the branches; in autumn the stubble field is a favorite feeding spot, where they pick up the scattered grain, and eat the tender heart shoots of the clover, and, Dixon says, they feed upon the growing turnip plants, and in keen weather when the snow lies deep they will make a meal on the turnips themselves. In their favor, however, is the fact that in the crops of these Doves are often found the seeds of noxious weeds, as the charlock and dock.

THE MOURNING DOVE.

Dear Young Bird Lovers:

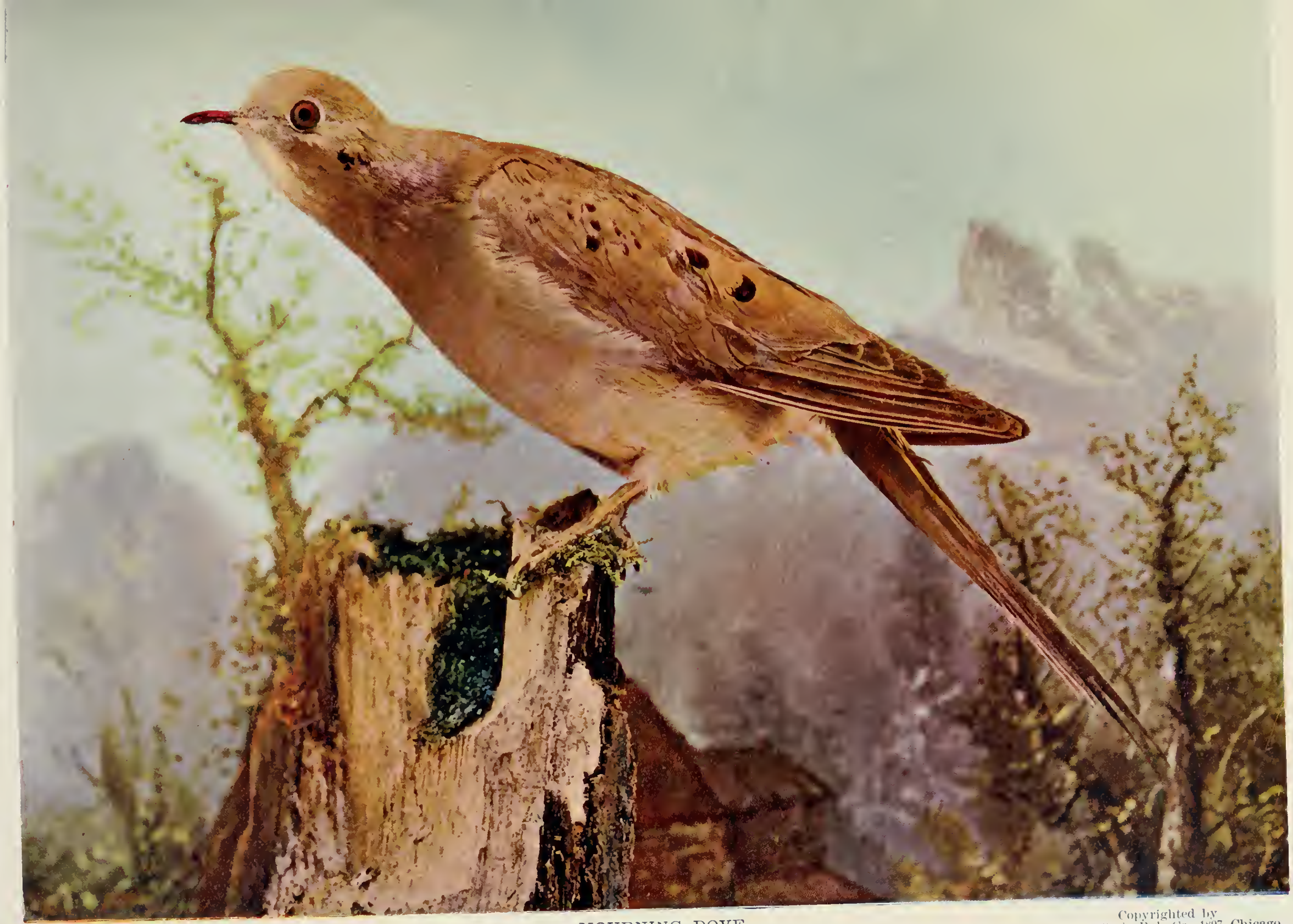
Most every person thinks that, while my actions are very pretty and attractive, and speak much in my favor, I can only really say, *Coo-o*, *Coo-o*, which they also think does not mean anything at all. Well, I just thought I would undeceive them by writing you a letter. Many grown up people fancy that we birds cannot express ourselves because we don't know very much. Of course, there is a good reason why they have this poor opinion of us. They are so busy with their own private concerns that they forget that there are little creatures like ourselves in the world who, if they would take a little time to become acquainted with them, would fill their few hours of leisure with a sweeter recreation than they find in many of their chosen outings. A great English poet, whose writings you will read when you get older, said you should look through Nature up to Nature's God. What did he mean? I think he had us birds in his mind, for it is through a study of our habits, more perhaps than that of the voiceless trees or the dumb four-footed creatures that roam the fields, that your hearts are opened to see and admire real beauty. We birds are the true teachers of faith, hope, and charity,—faith, because we trust one another; hope, because, even when our mother Nature seems unkind, sending the drifting snow and the bitter blasts of winter, we sing a song of summer time; and charity, because we are never fault finders.

I believe, without knowing it, I have been telling you about myself and my mate. We Doves are very sincere, and every one says we are constant.

If you live in the country, children, you must often hear our voices. We are so tender and fond of each other that we are looked upon as models for children, and even grown-up folks. My mate does not build a very nice nest—only uses a few sticks to keep the eggs from falling out—but she is a good mother and nurses the little ones very tenderly. Some people are so kind that they build for us a dove cote, supply us with wheat and corn, and make our lives as free from care and danger as they can. Come and see us some day, and then you can tell whether my picture is a good one. The artist thinks it is and he certainly took lots of pains with it.

Now, if you will be kind to all birds, you will find me, in name only,

Mourning Dove.



From col. F. M. Woodruff.

MOURNING DOVE.
3/5 Life-size.

Copyrighted by
Nature Study Pub. Co., 1897, Chicago.

HOW THE BIRDS SECURED THEIR RIGHTS.

Deuteronomy xxxii 6-7.—"If a bird's nest chance to be before thee in the way, in any tree, or on the ground, young ones or eggs, and the dam sitting upon the young, or upon the eggs, thou shalt not take the dam with the young. But thou shalt in anywise let the dam go, that it may be well with thee, and that thou may prolong thy days."

IT is said that the following petition was instrumental in securing the adoption in Massachusetts of a law prohibiting the wearing of song and insectivorous birds on women's hats. It is stated that the interesting document was prepared by United States Senator Hoar. The foregoing verse of Scripture might have been quoted by the petitioning birds to strengthen their position before the lawmakers:

"TO THE GREAT AND GENERAL COURT OF THE COMMONWEALTH OF MASSACHUSETTS: We, the song birds of Massachusetts and their playfellows, make this our humble petition. We know more about you than you think we do. We know how good you are. We have hopped about the roofs and looked in at the windows of the houses you have built for poor and sick and hungry people, and little lame and deaf and blind children. We have built our nests in the trees and sung many a song as we flew about the gardens and parks you have made so beautiful for your children, especially your poor children, to play in. Every year we fly a great way over the country, keeping all the time where the sun is bright and warm. And we know that whenever you do anything the other people all over this great land between the seas and the great lakes find it out, and pretty soon will try to do the same. We know. We know.

"We are Americans just the same as you are. Some of us, like some of you, came across the great sea. But most of the birds like us have lived here a long while; and the birds like us welcomed your fathers when they came here many, many years ago. Our fathers and mothers have always done their best to please your fathers and mothers.

"Now we have a sad story to tell you. Thoughtless or bad people are trying to destroy us. They kill us because our feathers are beautiful. Even pretty and sweet girls, who we should think would be our best friends, kill our brothers and children so that they may wear our plumage on their hats. Sometimes people kill us for mere wantonness. Cruel boys destroy our nests and steal our eggs and our young ones. People with guns and snares lie in wait to kill us; as if the place for a bird were not in the sky, alive, but in a shop window or in a glass case. If this goes on much longer all our song birds will be gone. Already we are told in some other countries that used to be full of birds they are now almost gone. Even the Nightingales are being killed in Italy.

"Now we humbly pray that you will stop all this and will save us from this sad fate. You have already made a law that no one shall kill a harmless song bird or destroy our nests or our eggs. Will you please make another one that no one shall wear our feathers, so that no one shall kill us to get them? We want them all ourselves. Your pretty girls are pretty enough without them. We are told that it is as easy for you to do it as for a blackbird to whistle.

"If you will, we know how to pay you a hundred times over. We will teach your children to keep themselves clean and neat. We will show them how to live together in peace and love and to agree as we do in our nests. We will build pretty houses which you will like to see. We will play about your garden and flowerbeds —ourselves like flowers on wings—without any cost to you. We will destroy the wicked insects and worms that spoil your cherries and currants and plums and apples and roses. We will give you our best songs, and make the spring more beautiful and the summer sweeter to you. Every June morning when you go out into the field, Oriole and Bluebird and Blackbird and Bobolink will fly after you, and make the day more delightful to you. And when you go home tired after sundown Vesper Sparrow will tell you how grateful we are. When you sit down on your porch after dark, Fifebird and Hermit Thrush and Wood Thrush will sing to you; and even Whip-poor-will will cheer you up a little. We know where we are safe. In a little while all the birds will come to live in Massachusetts again, and everbody who loves music will like to make a summer home with you."

The singers are:

Brown Thrasher,
Robert o'Lincoln,
Vesper Sparrow,
Hermit Thrush,
Robin Redbreast.
Song Sparrow,
Scarlet Tanager,
Summer Redbird,
Blue Heron,
Humming Bird,
Yellow Bird,
Whip-poor-will,
Water Wagtail,
Woodpecker,
Pigeon Woodpecker,
Indigo Bird,
Yellow Throat,
Wilson's Thrush,
Chickadee.
King Bird,
Swallow,
Cedar Bird,
Cow Bird,
Martin,
Veery,
Vireo,
Oriole,
Blackbird,
Fife Bird,
Wren,
Linnet,
Pewee,
Phoebe,
Yoke Bird,
Lark,
Sandpiper,
Chewink.

THE CAPTIVE'S ESCAPE.

I saw such a sorrowful sight, my dears,
Such a sad and sorrowful sight,
As I lingered under the swaying vines,
In the silvery morning light.
The skies were so blue and the day was so fair
With beautiful things untold,
You would think no sad and sorrowful thing
Could enter its heart of gold.

A fairy-like cage was hanging there,
So gay with turret and dome,
You'd be sure a birdie would gladly make
Such a beautiful place its home.
But a wee little yellow-bird sadly chirped
As it fluttered to and fro;
I know it was longing with all its heart
To its wild-wood home to go.

I heard a whir of swift-rushing wings,
And an answering gladsome note;
As close to its nestlings prison bars,
I saw the poor mother bird float.
I saw her flutter and strive in vain
To open the prison door.
Then sadly cling with drooping wing
As if all her hopes were o'er.

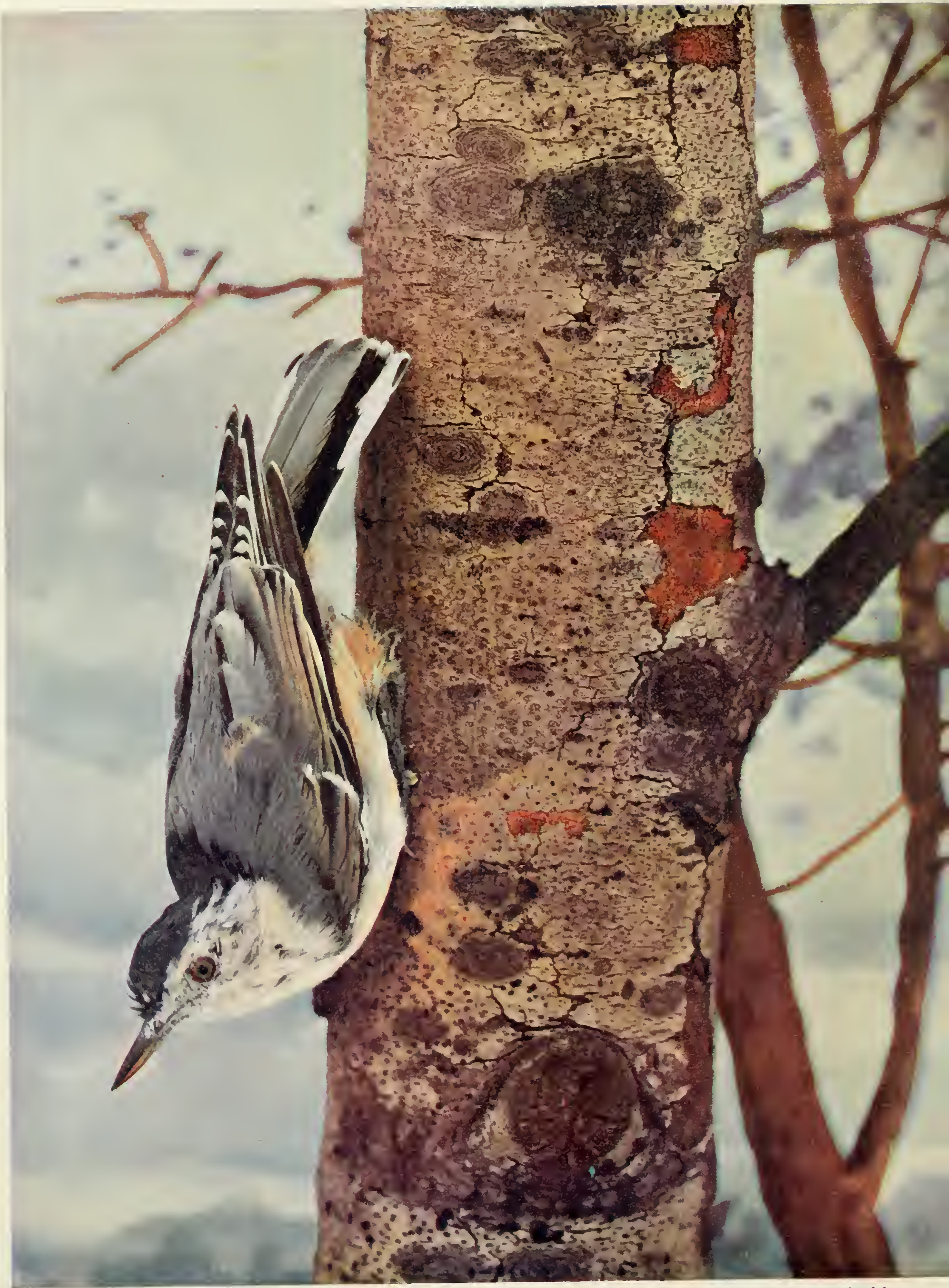
But ere I could reach the prison house
And let its sweet captive free,
She was gone like a yellow flash of light,
To her home in a distant tree.
"Poor birdie," I thought, "you shall surely go,
When mamma comes back again;"
For it hurt me so that so small a thing
Should suffer so much of pain.

And back in a moment she came again
And close to her darling's side
With a bitter-sweet drop of honey dew,
Which she dropped in its mouth so wide.
Then away, with a strange wild mournful note
Of sorrow, which seemed to say
"Goodbye, my darling, my birdie dear,
Goodbye for many a day."

A quick wild flutter of tiny wings,
A faint low chirp of pain,
A throb of the little aching heart
And birdie was free again.
Oh sorrowful anguished mother-heart,
'Twas all that she could do,
She had set it free from a captive's life
In the only way she knew.

Poor little birdie! it never will fly
On tiny and tireless wing,
Through the pearly blue of the summer sky,
Or sing the sweet songs of spring.
And I think, little dears, if you had seen
The same sad sorrowful sight,
You never would cage a free wild bird
To suffer a captive's plight.

—Mary Morrison.



From col. F. M. Woodruff.

WHITE-BREASTED NUT HATCH.
Life-size.

Copyrighted by
Nature Study Pub. Co., 1897, Chica

THE WHITE-BREASTED NUTHATCH.

NEARLY every one readily recognizes this species as it runs up and down and around the branches and trunks of trees in search of insect food, now and then uttering its curious *Quauk, quauk, quauk.* The White-breasted Nuthatch is often improperly called "Sapsucker," a name commonly applied to the Downy Woodpecker and others. It is a commom breeding bird and usually begins nesting early in April, and two broods are frequently reared in a season. For its nesting place it usually selects the decayed trunk of a tree or stub, ranging all the way from two to sixty feet above the ground. The entrance may be a knot hole, a small opening, or a small round hole with a larger cavity at the end of it. Often the old excavation of the Downy Woodpecker is made use of. Chicken feathers, hair, and a few dry leaves loosely thrown together compose the nest.

This Nuthatch is abundant throughout the State of Illinois, and is a permanent resident everywhere except perhaps of the extreme northern counties. It seems to migrate in spring and return in autumn, but, in reality, as is well known, only retreats to the woodlands to breed, emerging again when the food supply grows scant in the autumn.

The Nuthatches associate familiarly with the Kinglets and Titmice, and often travel with them. Though regarded as shy birds they are not really so. Their habits of restlessness render them difficult of examination. "Tree-mice" is the local name given them by the farmers, and would be very appropriate could they sometimes remain as motionless as that diminutive animal.

Careful observation has disclosed that the Nuthatches do not suck the sap from trees, but that they knock off bits of decayed or loose bark with the beak to obtain the grubs or larvae beneath. They are beneficial to vegetation. Ignorance is responsible for the misapplied names given to many of our well disposed and useful birds, and it would be well if teachers were to discourage the use of inappropriate names and familiarize the children with those recognized by the best authorities.

Referring to the Nuthatches Mr. Basket says: "They are little bluish gray birds, with white undervests—sometimes a little soiled. Their tails are ridiculously short, and never touch the tree; neither does the body, unless they are suddenly affrighted, when they crouch and look, with their beaks extended, much like a knot with a broken twig on it. I have sometimes put the bird into this attitude by clapping my hands loudly near the window. It is an impulse that seems to come to the bird before flight, especially if the head should be downward. His arrival is sudden, and seems often to be distinguished by turning a somersault before alighting, head downward, on the tree trunk, as if he had changed his mind so suddenly about alighting that it unbalanced him.

I once saw two Nuthatches at what I then supposed was a new habit. One spring day some gnats were engaged in their little crazy love waltzes in the air, forming small whirling clouds, and the birds left off bark-probing and began capturing insects on the wing. They were awkward about it with their short wings, and had to alight frequently to rest. I went out to them, and so absorbed were they that they allowed me to approach within a yard of a limb that I came to rest upon, where they would sit and pant till they caught their breath, when they went at it again. They seemed fairly to revel in a new diet and a new exercise."

SUMMARY

Page 83.

YELLOW WARBLER.—*Dendroica æstiva.* Other names: "Summer Yellow-bird," "Wild Canary," "Yellow-poll Warbler."

Range—The whole of North America; breeding throughout its range. In winter, the whole of middle America and northern South America.

Nest—Built in an apple tree, cup-shaped, neat and compact, composed of plant fibres, bark, etc.

Eggs—Four or five; greenish-white, spotted

Page 88.

HERMIT THRUSH.—*Turdus aonalaschkæ pallasii.* Other names: "Swamp Angel," "Ground Swamp Robin."

Range—Eastern North America, breeding from northern United States northward; wintering from about latitude 40° to the Gulf coast.

Nest—On the ground, in some low, secluded spot, beneath shelter of deep shrubbery. Bulky and loosely made of leaves, bark, grasses, mosses, lined with similar finer material.

Eggs—Three or four; of greenish blue, unspotted.

Page 91.

SONG SPARROW.—*Melospiza fasciata.*

Range—Eastern United States and British Provinces, west to the Plains, breeding chiefly north of 40°, except east of the Alleghenies.

Nest—On the ground, or in low bushes, of grasses, weeds, and leaves, lined with fine grass stems, roots, and, in some cases, hair.

Eggs—Four to seven; varying in color from greenish or pinkish white to light bluish green, spotted with dark reddish brown.

Page 95.

YELLOW-BILLED CUCKOO. — *Coccyzus americanus.* Other names: "Rain Crow," "Rain Dove," and "Chow-Chow."

Range—Eastern North America to British Provinces, west to Great Plains, south in winter, West Indies and Costa Rica.

Nest—In low tree or bush, of dried sticks, bark strips and catkins.

Eggs—Two to four; of glaucous green which fades on exposure to the light.

Page 100.

RUBY THROATED HUMMING BIRD.—*Trochilus colubris.*

Range—Eastern North America to the Plains, north to the fur countries, and south in winter to Cuba and Veragua.

Nest—A circle an inch and a half in diameter, made of fern wool, etc., shingled with lichens to match the color of the branch on which it is saddled.

Eggs—Two; pure white, the size of soup beans.

Page 101.

HOUSE WREN.—*Troglodytes aedon.*

Range—Eastern United States and southern Canada, west to the Mississippi Valley; winters in southern portions.

Nest—Miscellaneous rubbish, sticks, grasses, hay, and the like.

Eggs—Usually seven; white, dotted with reddish brown.

Page 106.

PHOEBE.—*Sayornis phœbe.* Other names: "Pewit," "Pewee."

Range—Eastern North America; in winter south to Mexico and Cuba.

Nest—Compactly and neatly made of mud and vegetable substances, with lining of grass and feathers.

Eggs—Four or five; pure white, sometimes sparsely spotted with reddish brown dots at larger end.

Page 110.

RUBY-CROWNED KINGLET. — *Regulus calendula.*

Range—Entire North America, wintering in the South and in northern Central America.

Nest—Very rare, only six known; of hair, feathers, moss, etc., bulky, globular, and partly pensile.

Eggs—Five to nine; dull whitish or pale puffy, speckled.

Page 113.

MOURNING DOVE.—*Zenaidura macrura.* Other names: "Carolina Dove," "Turtle Dove."

Range—Whole of temperate North America, south to Panama and the West Indies.

Nest—Rim of twigs sufficient to retain the eggs.

Eggs—Usually two; white.

Page 118.

WHITE-BREASTED NUTHATCH.—*Sitta carolinensis.* Other name: "Sapsucker," improperly called.

Range—Eastern United States and British Provinces.

Nest—Decayed trunk of tree or stub, from two to six feet from ground, composed of chicken feathers, hair, and dry leaves.

Eggs—Five to eight; white with a roseate tinge, speckled with reddish brown and a slight tinge of purple.

BIRDS.
ILLUSTRATED BY COLOR PHOTOGRAPHY.

VOL. II. OCTOBER. NO. 4.

BIRDS IN CAPTIVITY.

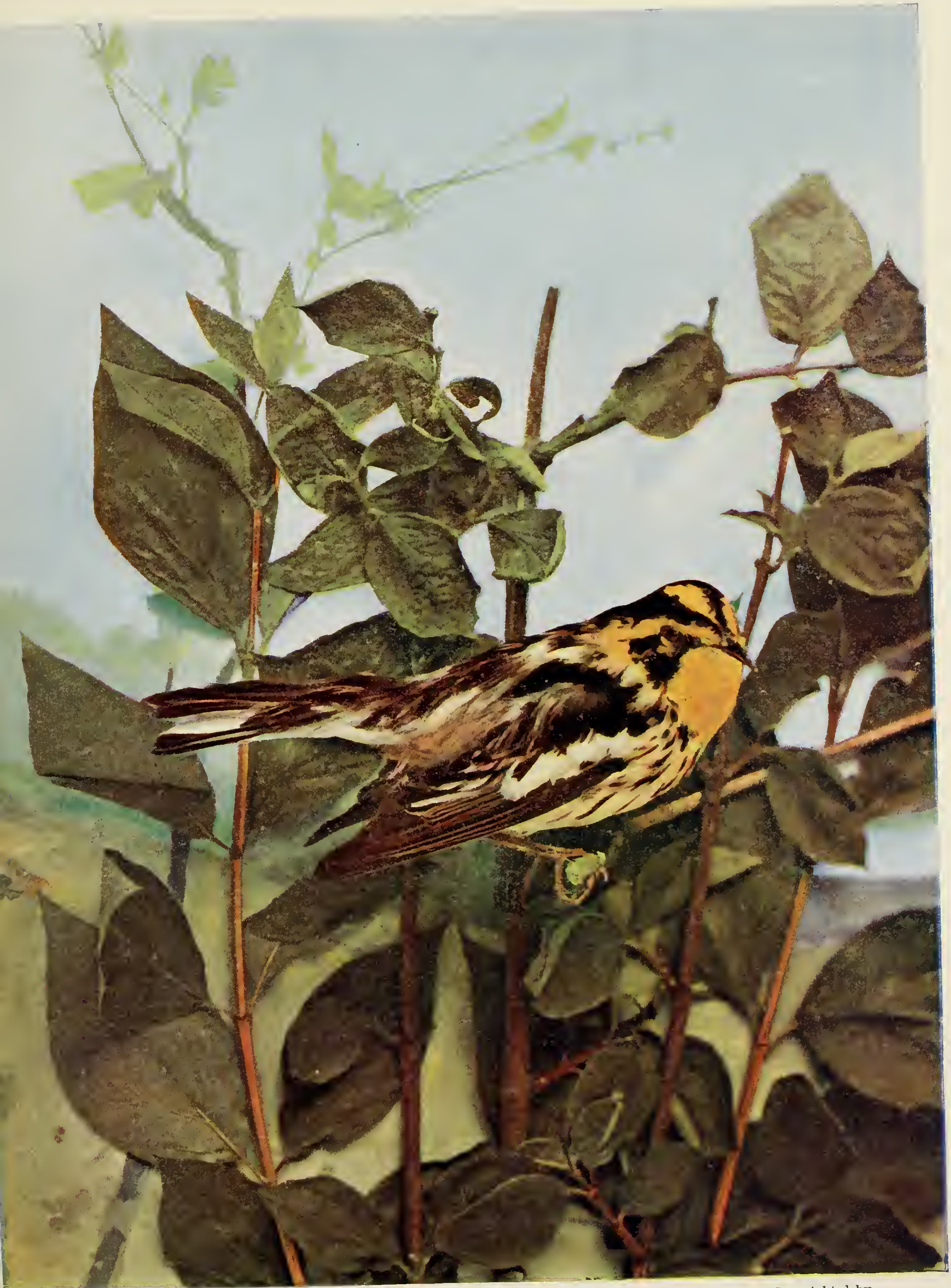
IT was our intention in this article to give a number of instances of a pathetic nature concerning the sufferings of the various species of birds which it has been, and still is, a habit with many people to keep confined in cages totally inadequate for any other purpose than that of cruelty. The argument that man has no moral right to deprive an innocent creature of liberty will always be met with indifference by the majority of people, and an appeal to their intelligence and humanity will rarely prove effective. To capture singing birds for any purpose is, in many states, prohibited by statute. But the law is violated. Occasionally an example is made of one or more transgressors, but as a rule the officers of the law, whose business it should be to prevent it, manifest no interest whatever in its execution. The bird trappers as well know that it is against the law, but so long as they are unmolested by the police, they will continue the wholesale trapping. A contemporary recently said: "It seems strange that this bird-catching industry should increase so largely simultaneously with the founding of the Illinois Audubon Society. The good that that society has done in checking the habit of wearing birds in bonnets, seems to have been fairly counterbalanced by the increase in the number of songsters captured for cage purposes. These trappers choose the nesting season as most favorable for their work, and every pair of birds they catch means the loss of an entire family in the shape of a set of eggs or a nestful of young left to perish slowly by starvation."

This is the way the trappers proceed. They are nearly all Germans. Bird snaring is a favorite occupation in Germany and the fondness for the cruel work was not left behind by the emigrants. More's the pity. These fellows fairly swarm with their bird limes and traps among the suburbs, having an eye only to the birds of brightest plumage and sweetest song. "They use one of the innocents as a bait to lure the others to a prison." "Two of the trappers," says one who watched them, "took their station at the edge of an open field, skirted by a growth of willows. Each had two cage traps. The device was divided into two parts by wires running horizontally and parallel to the plane of the floor. In the lower half of each cage was a male American Goldfinch. In the roof of the traps were two little hinged doors, which turned backward and upward, leaving an opening. Inside the upper compartment of the trap, and accessible through the doorway in the roof, was a swinging perch. The traps were placed on stumps among the growth of thistles and dock weed, while the trappers hid behind the trees. The Goldfinches confined in the lower sections of the traps had been the victims of the trappers earlier in the season, and the sight of their familiar haunts, the sunlight, the breeze, and the swaying willow branches, where so often they had perched and sung, caused them to flutter about and to utter pathetically the call note of their days of freedom. It is upon this yearning for liberty and its manifestation that the bird trappers depend to secure more victims. No sooner does the piping call go forth from the golden throats of the little prisoners, than a reply comes from the thistle tops, far down the field. A moment more and the traps are surrounded with the black and yellow beauties. The fact that one of their own kind is within the curious little house which confronts them seems to send all their timidity to the winds and they fairly fall over one another in their endeavor to see what it all means. Finally one finds the doorway in the roof and drops upon the perch within. Instantly the doors close and a Goldfinch is a prisoner."

Lawrence Sterne alone, of sentimental writers, has put in adequate language something of the feeling that should stir the heart of the sympathetic, at least, on seeing the unjust confinement of innocent birds. The Starling, which is the subject of his elevated sentiment, will appear in an early number of BIRDS. Sterne had just been soliloquizing somewhat favorably of the Bastile, when a voice, which he took to be that of a child, complained "it could not get out." "I looked up and down the passage, and seeing neither man, woman, nor child, I went out without further attention. In my return back through the passage, I heard the same words repeated twice over, and looking up, I saw it was a Starling hung in a little cage. 'I can't get out, I can't get out,' said the Starling. I stood looking at the Bird, and to every person who came through the passage, it ran fluttering to the side, towards which they approached it, with the same lamentation of its captivity. 'I can't get out,' said the Starling. 'God help thee!' said I, 'but I'll let thee out, cost what it will;' so I turned about the cage to get the door. It was twisted and double-twisted so fast with wire, there was no getting it open without pulling the cage to pieces. I took both hands to it. The bird flew to the place where I was attempting its deliverance, and thrusting his head through the trellis, pressed his breast against it as if impatient. 'I fear, poor creature,' said I, 'I can't set thee at liberty.' 'No,' said the Starling, 'I can't get out,' 'I can't get out,' said the Starling. I vow I never had my affections more tenderly awakened; or do I remember an incident in my life where the dissipated spirits, to which my reason had been a bubble, were so suddenly called home. Mechanical as the notes were, yet so true in tune to Nature were they chanted, that disguise thyself as thou wilt, still, Slavery,' said I, 'still thou art a bitter draught; and though thousands in all ages have been made to drink of thee, thou art no less bitter on that account. No, thou thrice sweet and gracious goddess liberty, whose taste is grateful, and ever will be so, till nature herself shall change; no tint of woods can spot thy snowy mantle.'"

The bird in his cage pursued Sterne into his room, where he composed his apostrophe to liberty. It would be well indeed, if a sentiment could be aroused which would prohibit absolutely the caging of birds, as well as their wanton destruction, and if the children are taught that "tenderness which is the charm of youth," another generation will see it accomplished.

C. C. MARBLE.



From col. Chi. Acad. Sciences.

BLACKBURNIAN WARBLER.
Life-size.

Copyrighted by
Nature Study Pub. Co., 1897, Chicago.

THE BLACKBURNIAN WARBLER.

IF the children had had the naming of birds we venture to say that it would have been more appropriately done, and "Blackburnian," as many other names of Warblers, would have had no place in literature. There are about seventy-five well known Warblers, nearly all with common names indicating the most characteristic colors or habits, or partly descriptive of the bird itself. The common names of this beautiful Warbler are Orange-throated Warbler and Hemlock Warbler. Some one has suggested that it should be called the Torch Bird, for "half a dozen of them as they flash about in the pines, raising their wings and jerking their tails, make the darkest shadows seem breaking into little tongues of flame."

The Orange-throat is only migratory in Illinois, passing through in spring and fall, its summer home being chiefly if not wholly, to the northward, while it passes the winter in Central America and northern South America. It is found in New York and in portions of Massachusetts, frequenting the coniferous forests, and building its nest in bushes or small trees a few feet above the ground. Dr. C. Hart Merriam found a pair of these birds nesting in a grove of large white pines in Lewis county, New York. In the latter part of May the female was observed building, and on the second of June the nest contained four fresh eggs of the Warbler and one of the Cow bird. The nest was saddled on the horizontal limb about eight feet from the ground and about ten feet from the trunk. Nests have been found in pine trees in Southern Michigan at an elevation of forty feet. In all cases the nests are placed high in hemlocks or pines, which are the bird's favorite resorts. From all accounts the nests of this species are elegantly and compactly made, consisting of a densely woven mass of spruce twigs, soft vegetable down, rootlets, and fine shreds of bark. The lining is often intermixed with horse hairs and feathers. Four eggs of greenish-white or very pale bluish-green, speckled or spotted, have usually been found in the nests.

The autumnal male Warblers resemble the female. They have two white bands instead of one; the black stripes on the side are larger; under parts yellowish; the throat yellowish, passing into purer yellow behind. Few of our birds are more beautiful than the full plumaged male of this lovely bird, whose glowing orange throat renders it a conspicuous object among the budding and blossoming branches of the hemlocks. Chapman says, coming in May, before the woods are fully clad, he seems like some bright plumaged tropical bird who has lost his way and wandered to northern climes. The summer is passed among the higher branches in coniferous forests, and in the early fall the bird returns to surroundings which seem more in keeping with its attire.

Mr. Minot describes the Blackburnian Warbler's summer song as resembling the sylables *wee-see-wee-see*, while in the spring its notes may be likened to *wee-see-wee-see*, *tsee*, *tsee*, *tsee*, repeated, the latter sylables being on ascending scale, the very last shrill and fine.

THE LOST MATE.

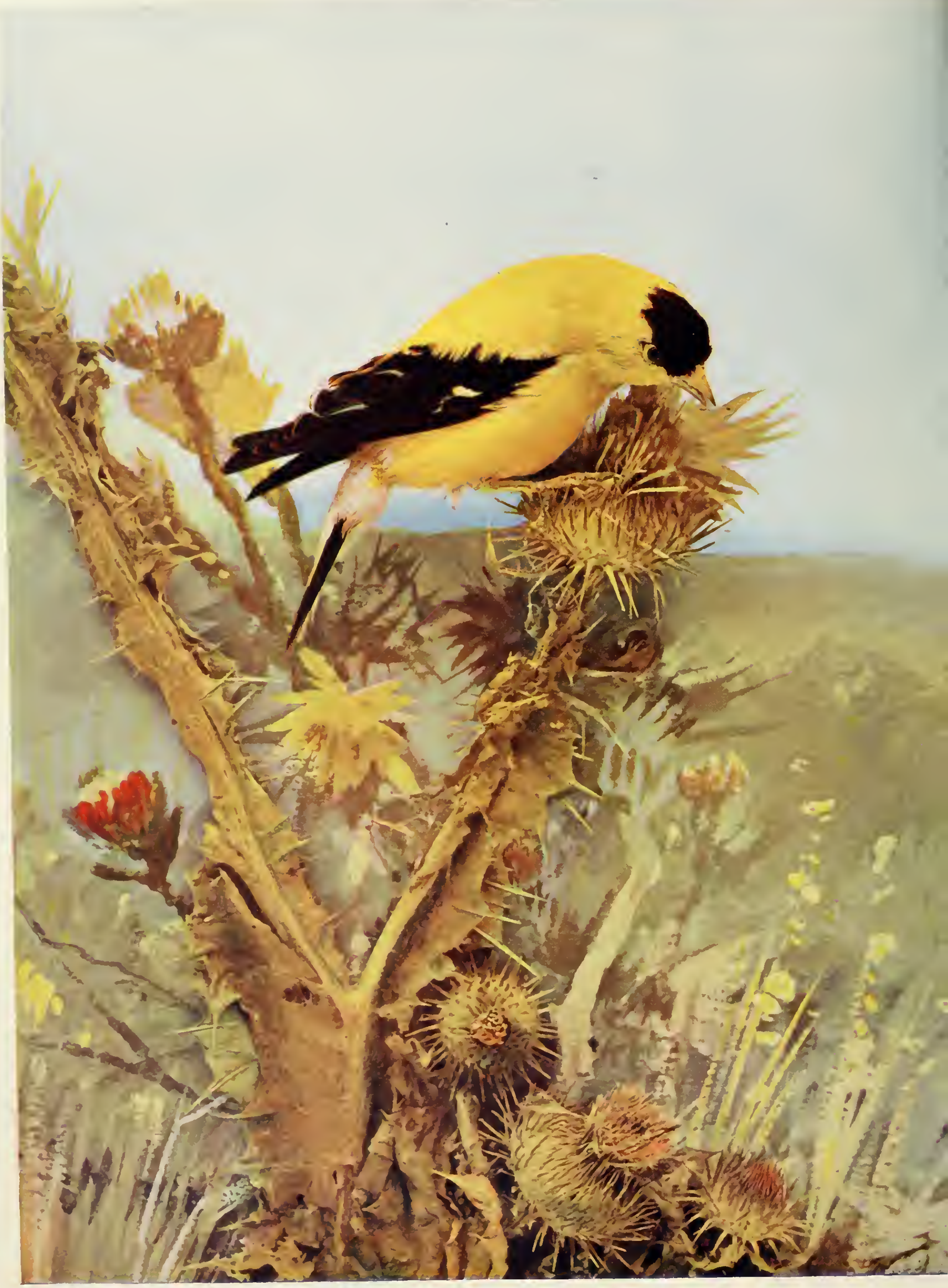
Shine! Shine! Shine!
Pour down your warmth, great Sun!
While we bask—we two together.

Two together!
Winds blow south, or winds blow north,
Day come white, or night come black,
Home, or rivers and mountains from home,
Singing all time, minding no time,
If we two but keep together.

Till of a sudden,
May be killed, unknown to her mate,
One forenoon the she-bird crouched not on the nest,
Nor returned that afternoon, nor the next,
Nor ever appeared again.

And thence forward, all summer, in the sound of the sea,
And at night, under the full of moon, in calmer weather,
Over the hoarse surging of the sea,
Or flitting from briar to briar by day,
I saw, I heard at intervals, the remaining one.

Blow! blow! blow!
Blow up, sea-winds, along Paumanok's shore!
I wait and I wait, till you blow my mate to me.
—Walt Whitman.



From col. F. M. Woodruff.

GOLDFINCH.
⅞ Life-size.

Copyrighted by
Nature Study Pub. Co., 1897, Chic

"Look, Mamma, look!" cried a little boy, as one day late in June my mate and I alighted on a thistle already going to seed. "Such a lovely bird! How jolly he looks, with that black velvet hat drawn over his eyes!"

"That's a Goldfinch," replied his mamma; "sometimes called the Jolly Bird, the Thistle Bird, the Wild Canary, and the Yellow Bird. He belongs to the family of Weed Warriors, and is very useful."

"He sings like a Canary," said Bobbie. "Just hear him talking to that little brown bird alongside of him."

That was my mate, you see, who *is* rather plain looking, so to please him I sang my best song, "*Per-chic-o-ree, per-chic-o-ree.*"

"That sounds a great deal better," said Bobbie; "because it's not sung by a little prisoner behind cage bars, I guess."

"It certainly is wilder and more joyous," said his mamma. "He is very happy just now, for he and his mate are preparing for housekeeping. Later on, he will shed his lemon-yellow coat, and then you won't be able to tell him from his mate and little ones."

"How they are gobbling up that thistle-down," cried Bobbie. "Just look!"

"Yes," said his mamma, "the fluff carries the seed, like a sail to which the seed is fastened. By eating the seed, which otherwise would be carried by the wind all over the place, these birds do a great amount of good. The down they will use to line their nests."

"How I should like to peep into their nest," said Bobbie; "just to peep, you know; not to rob it of its eggs, as boys do who are not well brought up."

My mate and I were so pleased at that, we flew off a little way, chirping and chattering as we went.

"Up and down, up and down," said Bobbie; "how prettily they fly."

"Yes," said his mamma; "that is the way you can always tell a Goldfinch when in the air. A dip and a jerk, singing as he flies."

"What other seeds do they eat, mamma?" presently asked Bobbie.

"The seeds of the dandelion, the sunflower, and wild grasses generally. In the winter, when these are not to be had, the poor little fellows have a very hard time. People with kind hearts, scatter canary seed over their lawns to the merry birds for their summer songs, and for keeping down the weeds.

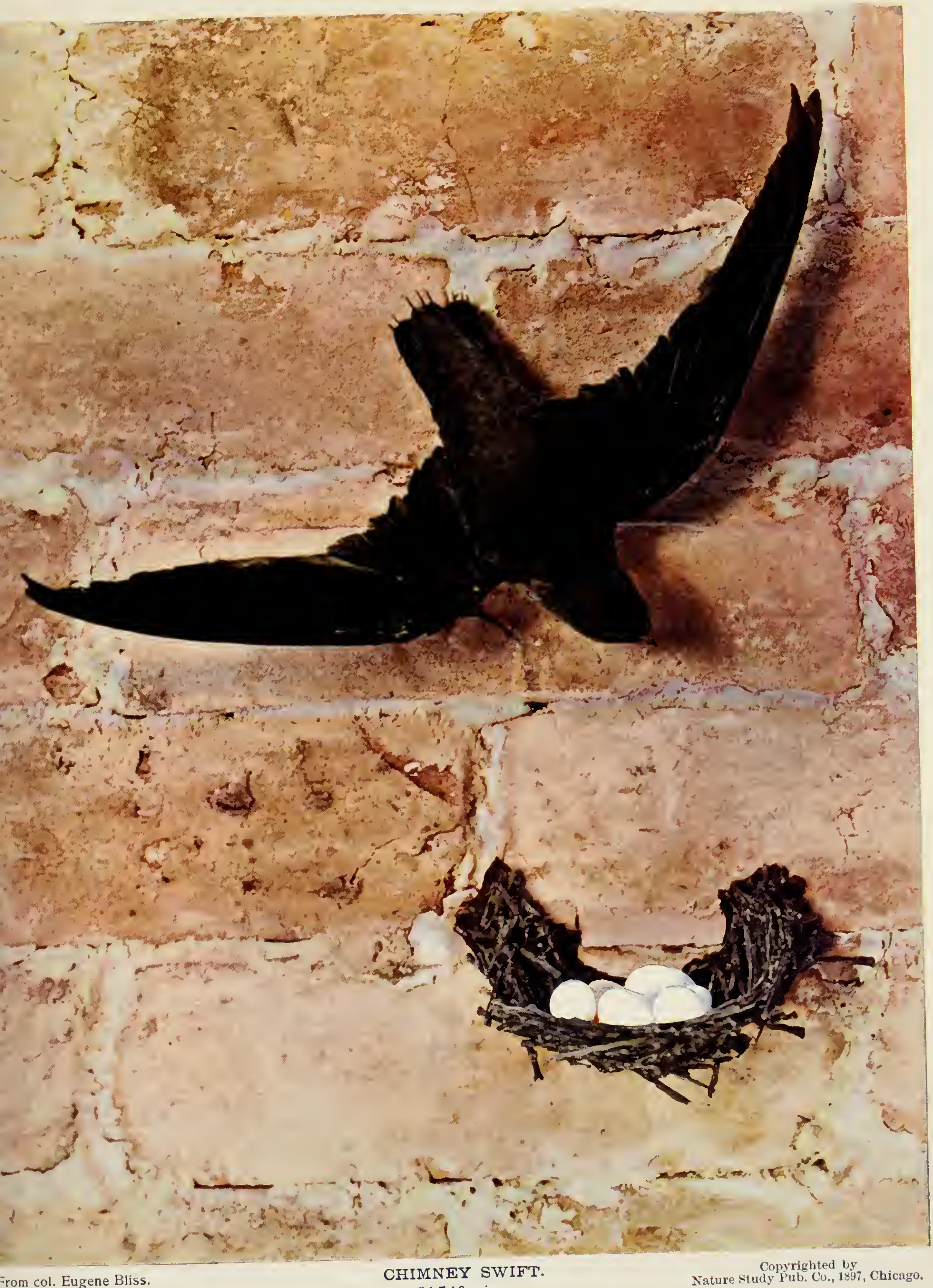
THE GOLDFINCH.

ACCORDING to one intelligent observer, the Finches are, in Nature's economy, entrusted with the task of keeping the weeds in subjection, and the gay and elegant little Goldfinch is probably one of the most useful, for its food is found to consist, for the greater part, of seeds most hurtful to the works of man. "The charlock that so often chokes his cereal crops is partly kept in bounds by his vigilance, and the dock, whose rank vegetation would, if allowed to cast all its seeds, spread barrenness around, is also one of his store houses, and the rank grasses, at their seeding time, are his chief support." Another writer, whose study of this bird has been made with care, calls our American Goldfinch one of the loveliest of birds. With his elegant plumage, his rythmical, undulatory flight, his beautiful song, and his more beautiful soul, he ought to be one of the best beloved, if not one of the most famous; but he has never yet had half his deserts. He is like the Chickadee, and yet different. He is not so extremely confiding, nor should I call him merry. But he is always cheerful, in spite of his so-called plaintive note, from which he gets one of his names, and always amiable. So far as I know, he never utters a harsh sound; even the young ones asking for food, use only smooth, musical tones. Durthe pairing season, his delight often becomes rapturous. To see him then, hovering and singing,—or, better still, to see the devoted pair hovering together, billing and singing,—is enough to do even a cynic good. The happy lovers! They have never read it in a book, but it is written on their hearts,

> "The gentle law that each should be
> The other's heaven and harmony."

In building his nest, the Goldfinch uses much ingenuity, lichens and moss being woven so deeply into the walls that the whole surface is quite smooth. Instead of choosing the forks of a bough, this Finch likes to make its nest near the end of a horizontal branch, so that it moves about and dances up and down as the branch is swayed by the wind. It might be thought that the eggs would be shaken out by a tolerably sharp breeze, and such would indeed be the case, were they not kept in their place by the form of the nest. On examination, it will be seen to have the edge thickened and slightly turned inward, so that when the nest is tilted on one side by the swaying of the bough, the eggs are still retained within. It is lined with vegetable down, and on this soft bed repose five pretty eggs, white, tinged with blue, and diversified with small grayish purple spots.

A curious story is told of a caged Goldfinch, which in pleasant weather always hung in a window. One day, hearing strange bird voices, the owner looked up from her seat and saw a Catbird trying to induce the Finch to eat a worm it had brought for it. By dint of coaxing and feeding the wild bird, she finally induced it to come often to the window, and one day, as she sat on the porch, the Catbird brought a berry and tried to put it into her mouth. We have often seen sparrows come to the window of rooms where canaries were imprisoned, but it has uniformly been to get food and not to administer it. The Catbird certainly thus expressed its gratitude.



rom col. Eugene Bliss.

CHIMNEY SWIFT.
⅔ Life-size.

Copyrighted by
Nature Study Pub. Co., 1897, Chicago.

THE CHIMNEY SWIFT.

CHIEF POKAGON, of the Pottawattamie Indians, in an article in *The Osprey*, writes delightfully of the Chimney Swift, and we quote a portion of it describing a peculiar habit of the bird. The chief was a youth when he made the observation, and he writes in the second person:

"As you look, you see the head of the young chief is turning slowly around, watching something high in air above the stream; you now begin to look in the same direction, catching glimpses every now and then, of the segment of a wild revolving ring of small unnumbered birds circling high above the trees. Their twittering notes and whizzing wings create a musical, but wild, continued roar. You now begin to realize he is determined to understand all about the feathered bees, as large as little birds, the village boy had seen. The circle continues to decrease in size, but increases the revolution until all the living, breathing ring swings over the stream in the field of your vision, and you begin to enquire what means all this mighty ingathering of such multitude of birds. The young chief in admiration claps his hands, leaping towards the stream. The twittering, whizzing roar continues to increase; the revolving circle fast assumes a funnel shape, moving downward until the point reaches the hollow in the stub, pouring its living mass therein until the last bird dropped out of sight. Rejoicing in wonder and admiration, the youth walks round the base of the stub, listening to the rumbling roar of fluttering wings within. Night comes on, he wraps his blanket closer about him, and lies down to rest until the coming day, that he may witness the swarming multitudes pass out in early morning. But not until the hour of midnight does he fall asleep, nor does he wake until the dawn of day, when, rising to his feet, he looks upward to the skies. One by one the stars disappear. The moon grows pale. He listens. Last night's familiar roar rings in his ears. He now beholds swarming from out the stub the living, breathing mass, forming in funnel shape, revolving like a top, rising high in air, then sweeping outward into a wide expanding ring, until the myriads of birds are scattered wide, like leaves before the whirlwind."

And then what do they do? Open the mouth of a swallow that has been flying, and turn out the mass of small flies and other insects that have been collected there. The number packed into its mouth is almost incredible, for when relieved from the constant pressure to which it is subjected, the black heap begins to swell and enlarge, until it attains nearly double its former size.

Chimney Swallow is the name usually applied to this Swift. The habit of frequenting chimneys is a recent one, and the substitution of this modern artificial home for hollow trees illustrates the readiness with which it adapts itself to a change in surroundings. In perching, they cling to the side of the chimney, using the spine-pointed tails for a support. They are most active early in the morning and late in the afternoon, when one may hear their rolling twitter as they course about overhead.

The question whether Chimney Swifts break off twigs for their nests with their feet is now being discussed by ornithologists. Many curious and interesting observations have been made, and the momentous question will no doubt in time be placed beyond peradventure.

THE LARK.

Up with me! up with me into the clouds!
For thy song, Lark, is strong;
Up with me! Up with me into the clouds!
Singing, singing,
With clouds and sky about thee ringing.
Lift me, guide me till I find
That spot which seems so to thy mind.

I have walked through wildernesses dreary,
And to-day my heart is weary;
Had I now the wings of a Fairy
Up to thee would I fly.
There is madness about thee, and joy divine
In that song of thine;
Lift me, guide me high and high
To thy banqueting place in the sky.
—WORDSWORTH.

SHORE LARK.

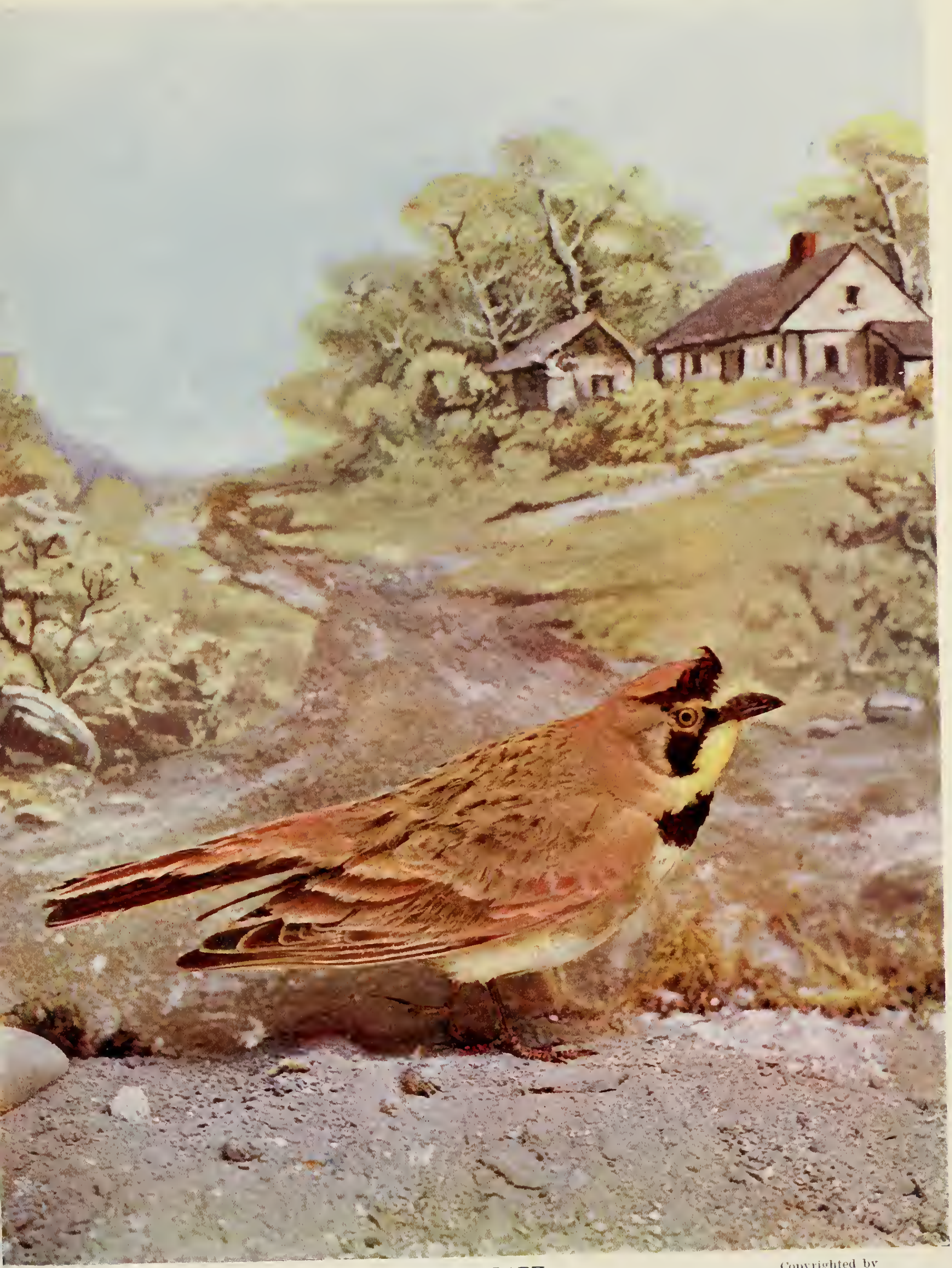
IF the variety of names by which this Lark is known is any indication of its popularity, its friends must be indeed numerous. Snow Lark, Snowbird, Prairie Lark, Sky Lark, American Sky Lark, Horned Lark, are a few of them. There is only one American Species, so far as known. It breeds in northeastern North America and Greenland, wintering in the United States. It also inhabits northern portions of the old world. The common name is derived from the tufts of black feathers over each ear, which the birds have the power of erecting at will like the so-called horns of some owls.

In the Eastern States, during the winter months, flocks of Horned Larks, varying in size from a dozen to those of a hundred or more, may be seen frequenting open plains, old fields, dry shores of bays, and the banks of rivers. According to Davie, as there are a number of geographical varieties of the Horned Lark, the greatest uncertainty has always attended their identification even by experts, and the breeding and winter ranges of the various subspecies do not yet seem to be clearly defined.

Audubon found this species on the low, mossy and sheltered hills along the dreary coast of Labrador. In the midst of the mosses and lichens that covered the rocks the bird imbedded its nest, composed of fine grasses, arranged in a circular form and lined with the feathers of grouse and other birds.

Chapman says these Larks take wing with a sharp, whistled note, and seek fresh fields or, hesitating, finally swing about and return to near the spot from which they were flushed. They are sometimes found associated with Snowflakes. The pinkish grey coloring is very beautiful, but in the Middle and Eastern States this bird is rarely seen in his spring garb, says an observer, and his winter plumage lacks the vivid contrasts and prime color.

As a singer the Shore Lark is not to be despised, especially in his nesting haunts. He has a habit of singing as he soars in the air, after the manner of the European Skylark.



From col. F. M. Woodruff.

HORNED LARK.
$^4/_5$ Life-size.

Copyrighted by
Nature Study Pub. Co., 1897, Chicago.

THE YELOW-BELLIED SAPSUCKER.

When the veins of the birch overflow in the spring,
Then I sharpen my bill and make the woods ring,
Till forth gushes—rewarding my tap, tap, tap!
The food of us Suckers—the rich, juicy sap.
—C. C. M.

MANY wild birds run up and down trees, and it seems to make little difference which end up they are temporarily, skirmishing ever to the right and left, whacking the bark with their bills, then quiet a brief moment, and again skirmishing around the tree. Sometimes an apple tree, says a recent writer, will have a perfect circle, not seldom several rings or holes round the tree—holes as large as a buck shot. The little skirmisher makes these holes, and the farmer calls it a Sapsucker. And such it is. Dr. Coues, however, says it is not a bird, handsome as it is, that you would care to have come in great numbers to your garden or orchard, for he eats the sap that leaks out through the holes he makes in the trees. When a great many holes have been bored near together, the bark loosens and peels off, so that the tree is likely to die. The Sapsucker also eats the soft inner bark which is between the rough outside bark and the hard heart-wood of the tree, which is very harmful. Nevertheless the bird does much good in destroying insects which gather to feed on the oozing sap. It sweeps them up in its tongue, which is not barbed, like that of other woodpeckers, but has a little brush on the end of it. It lacks the long, extensile tongue which enables the other species to probe the winding galleries of wood-eating larvæ.

Mr. William Brewster states that throughout the White Mountains of New Hampshire, and in most sections of Northern Maine, the Yellow-Bellied Woodpeckers outnumber all the other species in the summer season. Their favorite nesting sites are large dead birches, and a decided preference is manifested for the vicinity of water, though some nests occur in the interior of woods. The average height of the nesting hole from the ground is about forty feet. Many of the nests are gourd-like in shape, with the ends very smoothly and evenly chiseled, the average depth being about fourteen inches. The labors of excavating the nest and those of rearing the young are shared by both sexes. While this Sapsucker is a winter resident in most portions of Illinois, and may breed sparingly in the extreme northern portion, no record of it has been found.

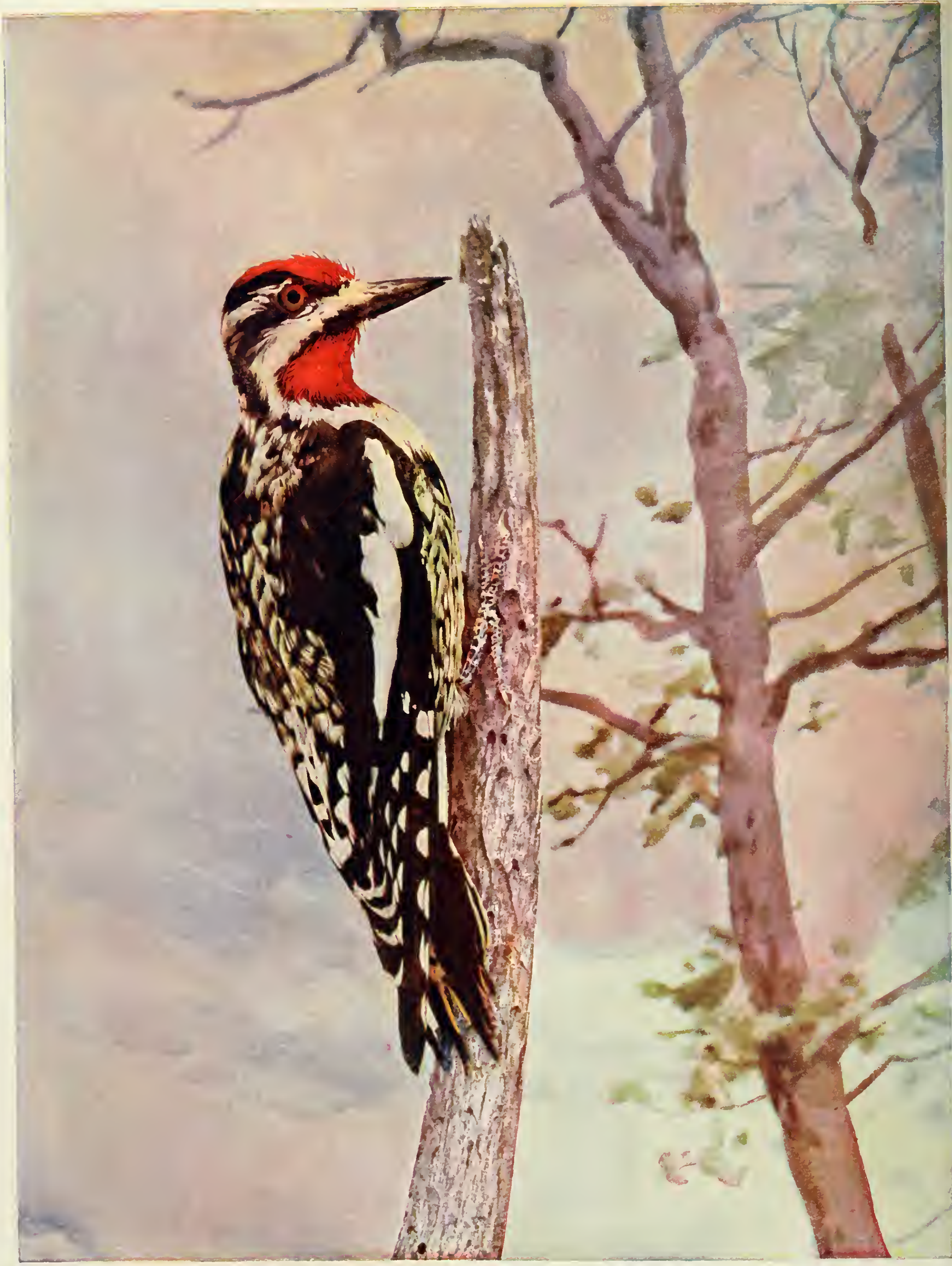
A walk in one of our extensive parks is nearly always rewarded by the sight of one or more of these interesting and attractive birds. They are usually so industriously engaged that they seem to give little attention to your presence, and hunt away, tapping the bole of the tree, until called elsewhere by some more promising field of operations. Before taking flight from one tree to another, they stop the insect search and gaze inquisitively toward their destination. If two of them meet, there is often a sudden stopping in the air, a twisting upward and downward, followed by a lively chase across the open to the top of a dead tree, and then a sly peeping round or over a limb, after the manner of all Woodpeckers. A rapid drumming with the bill on the tree, branch or trunk, it is said, serves for a love-song, and it has a screaming call note.

THE WARBLING VIREO.

THE Vireos are a family of singers and are more often heard than seen, but the Warbler has a much more musical voice, and of greater compass than any other member of the family. The song ripples like a brook, floating down from the leafiest tree-tops. It is not much to look at, being quite plainly dressed in contrast with the red-eyed cousin, the largest of the Vireos. In nesting time it prefers seclusion, though in the spring and mid-summer, when the little ones have flown, and nesting cares have ceased, it frequents the garden, singing in the elms and birches, and other tall trees. It rambles as well through the foliage of trees in open woodland, in parks, and in those along the banks of streams, where it diligently searches the under side of leaves and branches for insect life, "in that near-sighted way peculiar to the tribe." It is a very stoic among birds, and seems never surprised at anything, "even at the loud report of a gun, with the shot rattling about it in the branches, and, if uninjured, it will stand for a moment unconcerned, or move along, peering on every side amongst the foliage, warbling its tender, liquid strains."

The nest of this species is like that of the Red-eyed Vireo—a strong, durable, basket-like fabric, made of bark strips, lined with fine grasses. It is suspended by the brim in slender, horizontal forks of branches, at a great height from the ground.

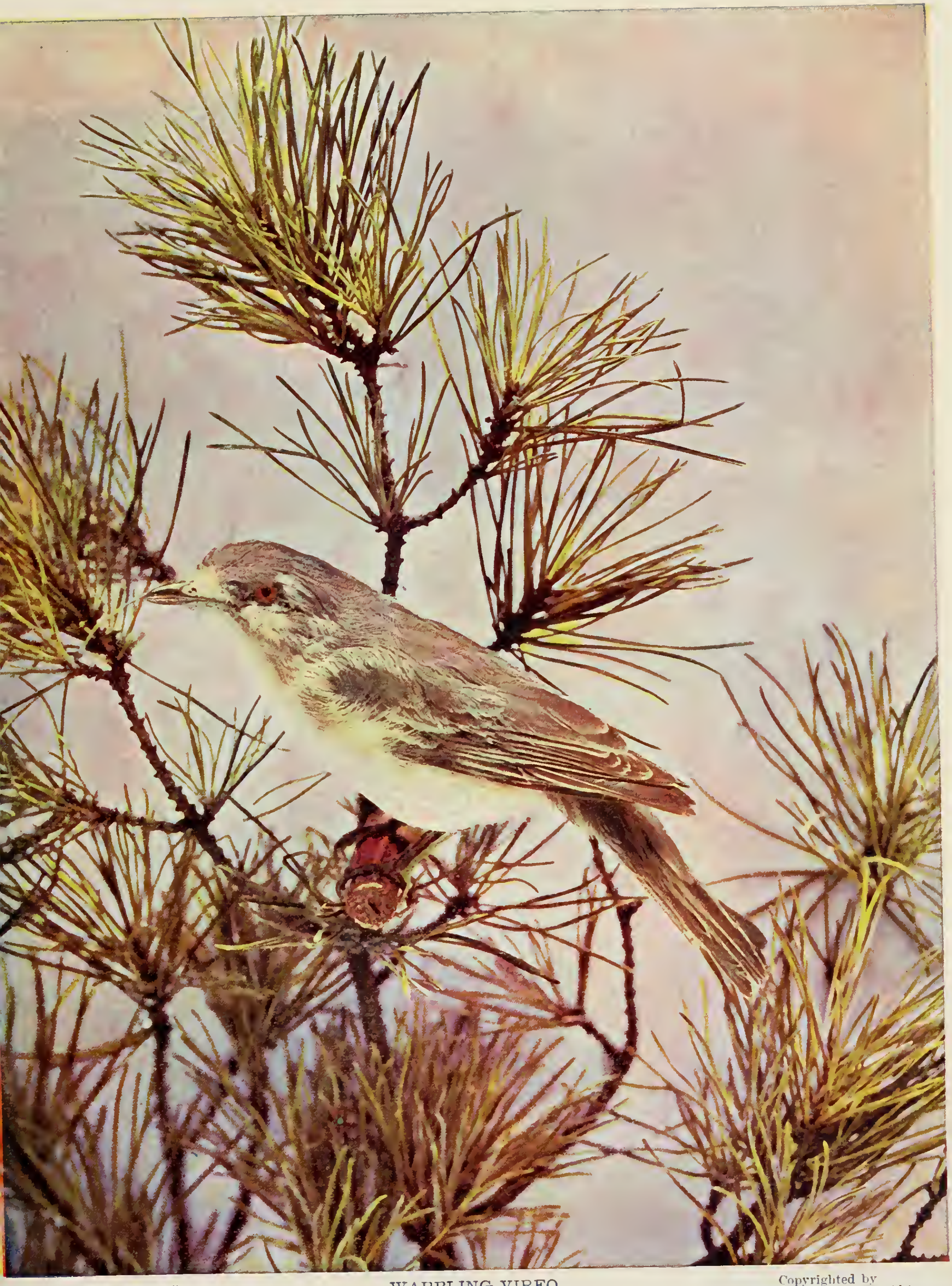
The Vireo is especially numerous among the elms of Boston Common, where at almost any hour of the day, from early in the month of May, until long after summer has gone, may be heard the prolonged notes of the Warbling species, which was an especial favorite of Dr. Thomas M. Brewer, author of "History of North American Birds." Its voice is not powerful, but its melody, it is said, is flute-like and tender, and its song is perhaps characterized more by its air of happy contentment, than by any other special quality. No writer on birds has grown enthusiastic on the subject, and Bradford Torrey alone among them does it scant justice, when he says this Vireo "is admirably named; there is no one of our birds that can more properly be said to warble. He keeps further from the ground than the others, and shows a strong preference for the elms of village streets, out of which his delicious music drops upon the ears of all passers underneath. How many of them hear it and thank the singer, is unhappily another question."



From col. F. M. Woodruff.

YELLOW-BELLIED SAPSUCKER.
$^{3}/_{5}$ Life-size.

Copyrighted by
Nature Study Pub. Co., 1897, Chicago.



From col. F. M. Woodruff.

WARBLING VIREO.
Life-size.

Copyrighted by
Nature Study Pub. Co., 1897, Chicago.

THE SAPSUCKER.

My Dear Young Friends:

During the long summer days, when you were enjoying golden vacation hours, I often took a peep at you from some dead tree limb or the side of a hemlock or beech. You saw me, perhaps, and were surprised at my courage; for other small birds whose voices you heard, but whose tiny bodies escaped your young eyes, appeared very timid in comparison.

But I am not so brave, after all, and know full well when my red hat is in danger. I am a good flyer, too, and can soon put a wide space between myself and certain wicked boys, who, I hope, by next vacation time will have learned so much about us that they will love every little feathered creature, and not seek to do them any harm.

Can you guess why I have such a queer name? I really ought to be popular in Illinois, for they tell me it is called the Sucker State, and that the people are proud of it. Well, I am called Sapsucker because much, if not most, of my food consists of the secret juices which flow through the entire body of the tree which you probably saw me running up and down and around. But you saw me, you say, very often on dead branches of trees, and surely they had no sap in them? No, but if you will look closely into my actions, you will see that I destroy many insects which drill their way into the wood and deposit their eggs. In my opinion, I do far more good than harm, though you will find some people who think otherwise.

Then, again, if there is utility in beauty, surely I am a benefit to every one. One day I heard a lady say that she never saw my head pop up from behind an old stump without bursting into laughter, I looked so funny. Now I took that as a compliment; for to give pleasure to those around us, I have heard, is one of our highest duties.

Next summer when you seek the pleasant places where I dwell,—in the old deadening where the trees wear girdles around them; in the open groves, where I flit from tree to tree; in the deep wooded districts, whence one hears the tinkling ripple of running waters, you may, if good and gentle, see pop up behind a stump the red hat of

Sapsucker.

THE WOOD PEWEE.

The listening Dryads hushed the woods ;
  The boughs were thick, and thin and few
  The golden ribbons fluttering through ;
Their sun-embroidered leafy hoods
  The lindens lifted to the blue ;
Only a little forest-brook
The farthest hem of silence shook ;
When in the hollow shades I heard—
Was it a spirit or a bird ?
Or, strayed from Eden, desolate,
Some Peri calling to her mate,
Whom nevermore her mate would cheer?
  " Pe-ri ! Pe-ri ! Peer ! "

* * * * * * * *

To trace it in its green retreat
  I sought among the boughs in vain ;
  And followed still the wandering strain
So melancholy and so sweet,
  The dim-eyed violets yearned with pain.

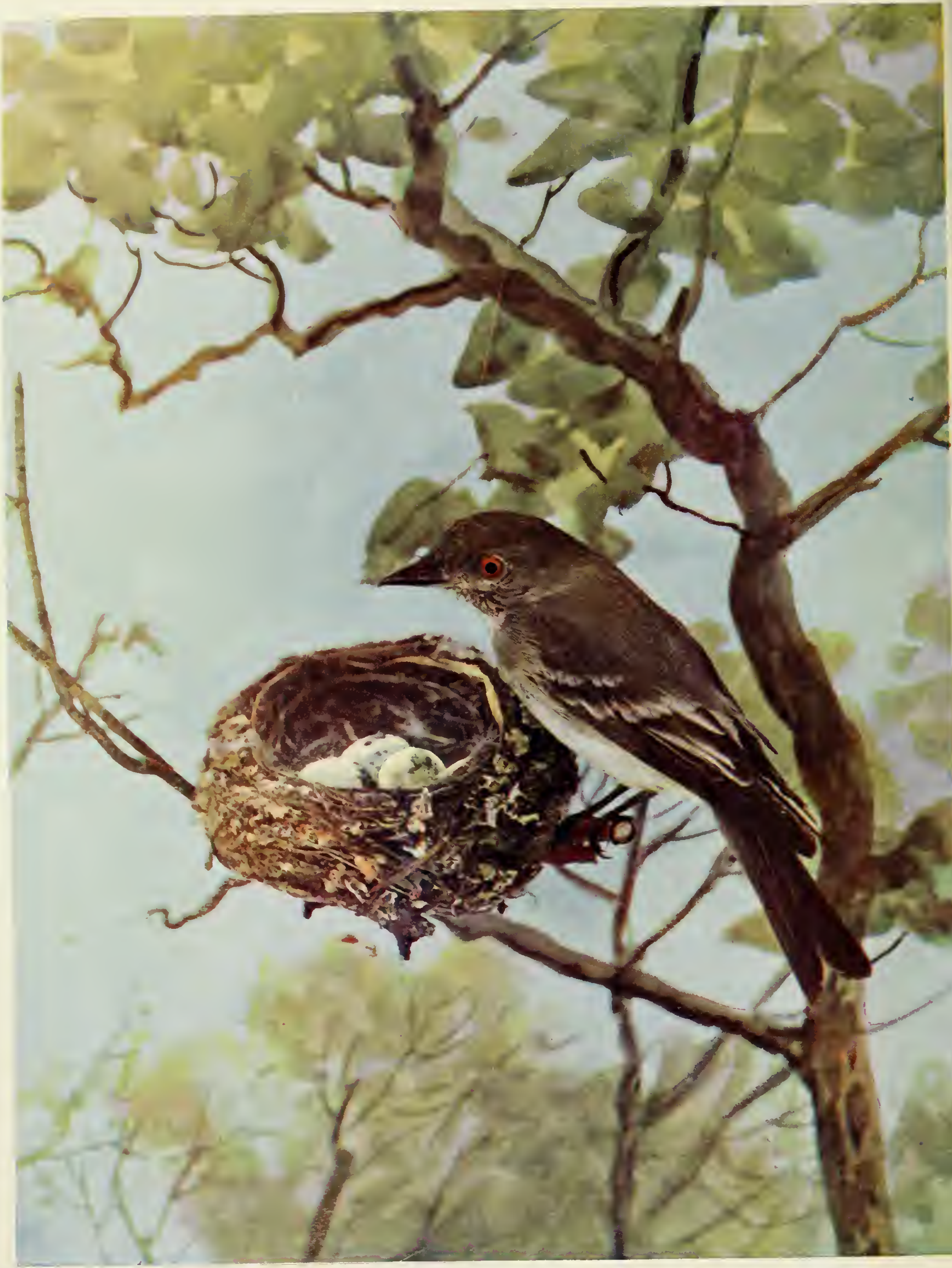
* * * * * * * *

Long drawn and clear its closes were—
  As if the hand of Music through
  The sombre robe of Silence drew
A thread of golden gossamer ;
  So pure a flute the fairy blue.
Like beggared princes of the wood,
In silver rags the birches stood ;
The hemlocks, lordly counselors,
Were dumb ; the sturdy servitors,
In beechen jackets patched and gray,
Seemed waiting spellbound all the day
That low, entrancing note to hear—
  " Pe-wee ! Pe-wee ! Peer ! "

* * * * * * * *

" Dear bird," I said, " what is thy name ? "
And thrice the mournful answer came,
So faint and far, and yet so near,
  " Pe-wee ! Pe-wee ! Peer ! "

—J. T. TROWBRIDGE.



From col. Chi. Acad Sciences.

WOOD PEWEE.
3/5 Life-size.

Copyrighted by
Nature Study Pub. Co., 1897, Chicago.

THE WOOD PEWEE.

I am called the Wood Pewee, but I don't always stay in the woods. If you have an orchard or a nice garden, you will hear me singing there in June.

People think I am not a happy bird, because my song seems so sad. They are very much mistaken. I am just as happy as any other little fellow dressed in feathers, and can flirt and flutter with the best of them.

Pewee! Pewee! Peer!

That is my song, and my mate thinks it is beautiful. She is never far away, and always comes at my call.

Always, did I say?

No; one day, when we were busy building our nest—which is very pretty, almost as dainty as that of our neighbor the Humming Bird—she flew away to quite a distance to find some soft lining-stuff on which to lay her eggs. I had been fetching and carrying all day the lichens to put round the nest, which was hidden among the thick leaves on the bough of a tree, and was resting by the side of it.

Pewee! Pewee! Peer!

"She will hear that," thought I, and again I sang it as loud as I could.

"I'll bring that fellow down, too," said a boy, who surely had never heard anything about our happy, innocent lives, and as I peered down at him, he flung a large stone, which struck the bough on which I sat. Oh, how frightened I was, and how quickly I flew away!

"He has killed my little mate, I thought. Still, I called in my plaintive way, *Pewee! Pewee! Peer!*"

A faint, low cry led me to the foot of a large tree, and there on the ground lay my mate, struggling to rise and fly to me."

"I think my wing is broken," she sobbed. "Oh, that wicked, wicked boy!"

I petted her with my broad, flat beak, and after a while she was able to fly with me to our nest; but it it was days and days before she was out of pain. I am sure if that boy sees my story in Birds, he will never give such an innocent *little* creature misery again.

I dress plainly, in a coat of olive and brown, and they *do* say my manners are stiff and abrupt.

But my voice is very sweet, and there is something about it which makes people say: "Dear little bird, sad little bird! what may your name be?"

Then I answer:

"*Pewee! Pewee! Peer!*

THE WOOD PEWEE.

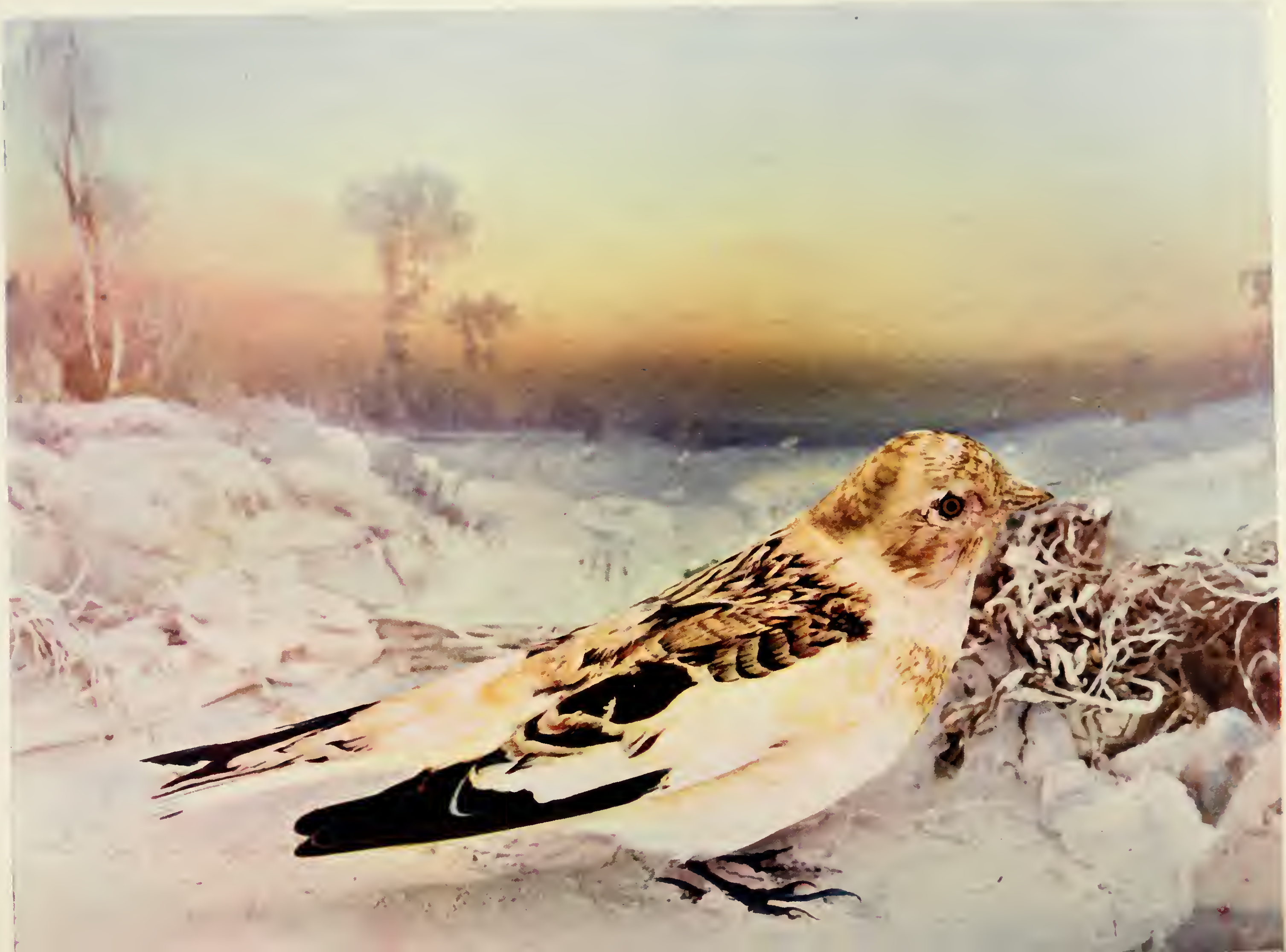
ALTHOUGH one of the most abundant species, common all over the United States, the retiring habits, plainness of dress, and quiet manners of this little bird have caused it to be comparatively little known. Dr. Brewer says that if noticed at all, it is generally confounded with the common Pewee, or Phoebe bird, though a little observation is sufficient to show how very distinct they are. The Wood Pewee will sit almost motionless for many minutes in an erect position, on some dead twig or other prominent perch, patiently watching for its insect prey. While its position is apparently so fixed, however, its eyes are constantly on the alert, and close watching will show that the bird now and then turns its head as its glance follows the course of some distant insect, while anon the feathers of the crown are raised, so as to form a sort of blunt pyramidal crest. This sentinel-like attitude of the Wood Pewee is in marked contrast to the restless motion of the Phoebe, who, even if perched, keeps its tail constantly in motion, while the bird itself seldom remains long in a fixed position. The notes of the two species (see August BIRDS) are as different as their habits, those of the Wood Pewee being peculiarly plaintive—a sort of wailing *pe-e-e-e-i, wee*, the first syllable emphasized and long drawn out, and the tone, a clear, plaintive, wiry whistle, strikingly different from the cheerful, emphatic notes of the true Pewee.

The Wood Pewee, like all of its family, is an expert catcher of insects, even the most minute, and has a remarkably quick perception of their near presence, even when the light of day has nearly gone and in the deep gloom of the thick woods. Dr. Brewer describes it as taking its station at the end of a low dead limb, from which it darts out in quest of insects, sometimes for a single individual, which it seizes with a sharp snap of its bill; and, frequently meeting insect after insect, it keeps up a constant snapping sound as it passes on, and finally returns to its post to resume its watch. While watching it occasionally twitters, with a quivering movement of the head and tail, uttering a feeble call-note, sounding like *pee-e*.

The nest of the Wood Pewee, which is always "saddled" and securely attached to a rather stout branch, usually lichen-covered, is said to be one of the most elegant examples of bird architecture. From beneath it so much resembles a natural portion of the limb, but for its betrayal by the owner, it would seldom be discovered. It is saucer-shaped, with thick walls, and the whole exterior is a beautiful "mosaic" of green, gray, and glaucous lichen. The eggs are a rich delicate cream color, ornamented by a "wreath" round the larger end of madder-brown, purple, and lilac spots.

The Wood Pewee has many admirers, a more interesting creature to watch while feeding being hard to imagine. Often you will find him in the parks. Sitting in some quiet, shady spot, if you wait, he will soon show himself as he darts from the fence post not far away, to return to it time after time with, possibly, the very insect that has been buzzing about your face and made you miserable. His movements are so quick that even the fly cannot elude him.

And to some he is pleasant as a companion. One who loves birds once saw this Flycatcher flying in a circle and repeating breathlessly his emphatic *chebec*. "He sang on the wing, and I have never heard notes which seemed more expressive of happiness."



Bobbie didn't want to go to school that morning, and he looked very cheerfully out upon the cloudy sky and falling flakes of snow, pretending to shiver a little when the angry gusts of wind blew the snow sharply into people's faces.

"I guess it's better for little boy's like me to stay at home such weather as this, mamma," said he, all the while hoping the snow would soon be deep enough for him to ride down the hill on his sled.

Before his mamma could reply Bobbie gave a cry of delight which drew her at once to the window.

As from the snow clouds, on bold and rapid wing, came whirling down an immense flock of birds, white, streaked with gray and brown, chirping, calling to one another, the whole flock settling upon the open places in a field in front of Bobbie's house.

"Oh, the dear little things," said Bobbie, "they looked like little white angels dropping out of the clouds."

"Those are our winter neighbors," said his mamma, "the Snow Buntings or Snowflakes—they visit us only in winter, their summer homes being away up North near the Arctic Circle in the region of perpetual snow."

"Do they build their nests in trees?" asked Bobbie, who never tired hearing about the birds.

"There are no trees in that bleak region, only scrubby bushes," was the answer. "They build a thick, deep grassy nest, well lined with rabbit fur, or Snow Owl feathers, which they tuck under a ledge of rock or bunch of grass."

"They chirrup just like sparrows," reflected Bobbie, "can they sing?"

"They only sing when up in their Northern home. There a male Snowflake will sing as merrily as his cousin the Goldfinch."

"They look like Sparrows, too," said Bobbie, "only whiter and softer, I think."

"In the summer they are nearly all white, the brown edges having worn away, leaving them pure black and white. They are very shy and suspicious, and at the least sound you will see them all whirl aloft braving the blasts of winter like little heroes."

"Well," said Bobbie, after a while, "if those little soft white birds can go about in such weather, I guess I can too," and in a few minutes with high rubber boots, and a fur cap drawn over his ears, off trudged Bobbie like another little hero to school.

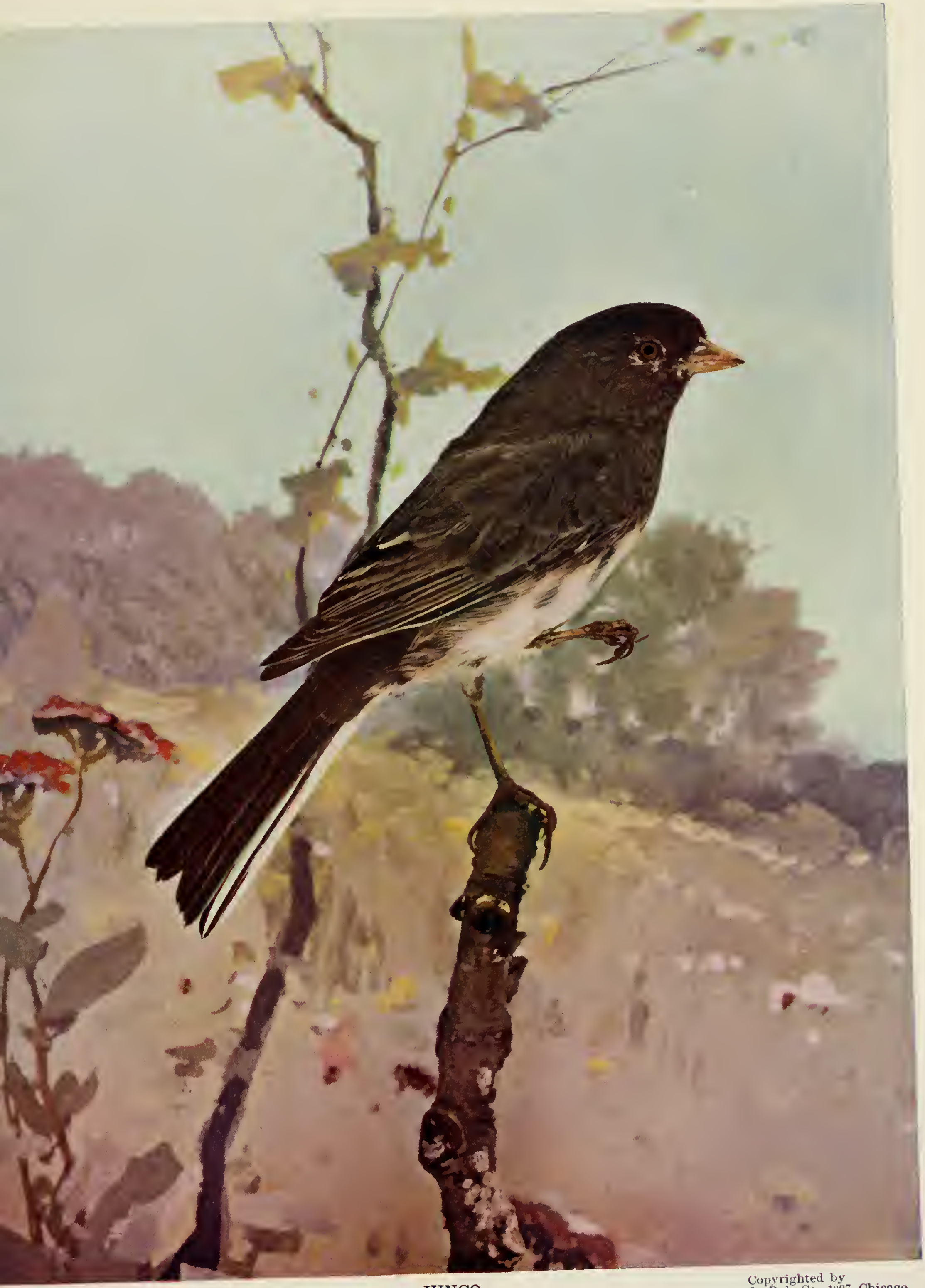
THE SNOWFLAKE.

THIS charming bird comes to us at a time when his presence may be truly welcomed and appreciated, nearly all our summer companions of the feathered tribe having departed. He might not inappropriately be named the great Snowflake, though in winter he wears a warm brown cloak, with black stripes, brown collar, and a brown and white vest. In summer, however, he is snow white, with black on the back, wings, and tail. He lives all over northern North America, and in the United States as far south as Georgia.

About the first of November, flocks of Snowflakes may be seen arriving, the males chanting a very low and somewhat broken, but very pleasant song. Some call him White Snowbird, and Snow Bunting, according to locality. The birds breed throughout the Arctic regions of both continents, the National Museum at Washington possessing nests from the most northern points of Alaska, (Point Barrow), and from Labrador, as well as from various intermediate localities.

These birds are famous seed eaters, and are rarely found in trees. They should be looked for on the ground, in the air, for they are constantly seeking new feeding grounds, in the barn-yard, or about the hay stack, where seeds are plentiful. They also nest on the ground, building a deep, grassy nest, lined with rabbit fur or feathers, under a projecting ledge of rock or thick bunch of grass. It seems curious that few persons readily distinguish them from their sparrow cousins, as they have much more white about them than any other color. Last November multitudes of them invaded Washington Park, settling on the ground to feed, and flying up and scurrying away to successive pastures of promise. With their soft musical voices and gentle manners, they were a pleasing feature of the late Autumn landscape. "Chill November's surly blast" making "field and forest bare," had no terrors for them, but rather spread before them a feast of scattered seeds, winnowed by it from nature's ripened abundance.

The Snowflakes disappear with the melting of their namesake, the snow. They are especially numerous in snowy seasons, when flocks of sometimes a thousand are seen in the old fields and meadows. It is unusual, though it has been known to breed in the Northern States. In July, 1831, Audubon found it nesting in the White Mountains, and Dr. J. A. Allen notes a pair as breeding near Springfield, Mass. The Arctic regions are its nesting place however, and these birds were probably belated on their return migration. The Snowflake and Shorelark are so much alike in habits, that the two species occasionally associate. Ernest E. Thompson says: "Apparently the Snowflakes get but little to eat, but in reality they always find enough to keep them in health and spirits, and are as fat as butter balls. In the mid-winter, in the far north, when the thermometer showed thirty degrees below zero, and the chill blizzard was blowing on the plains, I have seen this brave little bird gleefully chasing his fellows, and pouring out, as he flew, his sweet voluble song with as much spirit as ever Skylark has in the sunniest days of June."



om col. F. M. Woodruff.

JUNCO.
Life-size.

Copyrighted by
Nature Study Pub. Co., 1897, Chicago.

THE SLATE-COLORED JUNCO.

BLACK SNOWBIRD, in most of the United States and in Ontario, where it is a common resident, and White Bill, are names more often applied to this species of Sparrow than the one of Junco, by which it is known to ornithologists. It nests in the mountains of northern Pennsylvania, New York, and New England, and is a resident throughout the year in northeastern Ohio, and in Michigan. In all probability, the Snowbird does not breed, even occasionally, anywhere within the limits of the state of Illinois, though individuals may in very rare instances be found several weeks after others have departed for the north, these having probably received some injury which prevents their migration. Prof. Forbes refers to such an instance, which came under his own observation. He saw on a tree in the edge of a wood, in the southern part of the state, an adult specimen of the Junco, and only one. which, he says, astonished him.

Mr. William L. Kells states that in Ontario this Junco selects a variety of places for nesting sites, such as the upturned roots of trees, crevices in banks, under the sides of logs and stumps, a cavity under broken sod, or in the shelter of grass or other vegetation. The nest is made of dry grasses, warmly and smoothly lined with hair. The bird generally begins to nest the first week of May, and nests with eggs are found as late as August. A nest of the Junco was found on the rafters of a barn in Connecticut.

Almost any time after the first of October, little excursion parties of Juncos may be looked for, and the custom continues all winter long. When you become acquainted with him, as you surely will, during his visit, you will like him more and more for his cheerful habits. He will come to your back door, and present his little food petition, very merrily indeed. He is very friendly with the Chick-a-dee, and they are often seen together about in the barnyards, and he even ventures within the barn when seeds are frozen to the ground.

"The Doctor," in *Citizen Bird*, tells this pretty story of his winter pets:

"My flock of Juncos were determined to brave all weathers. First they ate the seeds of all the weeds and tall grasses that reached above the snow, then they cleaned the honeysuckles of their watery black berries. When these were nearly gone, I began to feed them every day with crumbs, and they soon grew very tame. At Christmas an ice storm came, and after that the cold was bitter indeed. For two days I did not see my birds; but on the third day, in the afternoon, when I was feeding the hens in the barnyard, a party of feeble, half-starved Juncos, hardly able to fly, settled down around me and began to pick at the chicken food. I knew at a glance that after a few hours more exposure all the poor little birds would be dead. So I shut up the hens and opened the door of the straw-barn very wide, scattered a quantity of meal and cracked corn in a line on the floor, and crept behind the door to watch. First one bird hopped in and tasted the food; he found it very good and evidently called his brothers, for in a minute they all went in and I closed the door upon them. And I slept better that night, because I knew that my birds were comfortable." The next afternoon they came back again. "I kept them at night in this way for several weeks, and one afternoon several Snowflakes came in with them. (See page 150.)

THE KINGBIRD.

IT is somewhat strange that there should be little unity of opinion concerning a bird as well known as is this charming fellow, who has at least one quality which we all admire—courage. We will quote a few of the opinions of well-known observers as to whether his other characteristics are admirable, and let the reader form his own conclusion.

John Burroughs says of him: "The exquisite of the family, and the braggart of the orchard, is the Kingbird, a bully that loves to strip the feathers off its more timid neighbors like the Bluebird, that feeds on the stingless bees of the hive, the drones, and earns the reputation of great boldness by teasing large hawks, while it gives a wide berth to the little ones." Decidedly, this classifies him with the English Sparrow. But we will hear Dr. Brewer: "The name, Kingbird, is given it on the supposition that it is superior to all other birds in the reckless courage with which it will maintain an unequal warfare. My own observations lead me to the conclusion that writers have somewhat exaggerated the quarrelsome disposition of this bird. I have never, or very rarely, known it to molest or attack any other birds than those which its own instinct prompts it to drive away in self-defense, such as Hawks, Owls, Eagles, Crows, Jays, Cuckoos, and Grackles." That Dr. Coues is a friend of the Kingbird, his language amply proves: "The Kingbird is not quarrelsome—simply very lively. He is the very picture of dash and daring in defending his home, and when he is teaching his youngsters how to fly. He is one of the best of neighbors, and a brave soldier. An officer of the guild of Sky Sweepers, also a Ground Gleaner and Tree Trapper killing robber-flies, ants, beetles, and rose-bugs. A good friend to horses and cattle, because he kills the terrible gadflies. Eats a little fruit, but chiefly wild varieties, and only now and then a bee." If you now have any difficulty in making up your verdict, we will present the testimony of one other witness, who is, we think, an original observer, as well as a delightful writer, Bradford Torrey. He was in the country. "Almost, I could have believed myself in Eden," he says. "But, alas, even the birds themselves were long since shut out of that garden of innocence, and as I started back toward the village a Crow went hurrying past me, with a Kingbird in hot pursuit. The latter was more fortunate than usual, or more plucky, actually alighting on the Crow's back, and riding for some distance. I could not distinguish his motions—he was too far away for that—but I wished him joy of his victory, and grace to improve it to the full. For it is scandalous that a bird of the Crow's cloth should be a thief; and so, although I reckon him among my friends—in truth, *because* I do so—I am always able to take it patiently when I see him chastised for his fault."

The Kingbird is a common bird in Eastern United States, but is rare west of the Rocky Mountains. It is perhaps better known by the name of Beebird or Bee-martin. The nest is placed in an orchard or garden, or by the roadside, on a horizontal bough or in the fork at a moderate height; sometimes in the top of the tallest trees along streams. It is bulky, ragged, and loose, but well capped and brimmed, consisting of twigs, grasses, rootlets, bits of vegetable down, and wool firmly matted together, and lined with feathers, hair, etc.

THE KINGBIRD.

You think, my young friends, because I am called Kingbird I should be large and fine looking.

Well, when you come to read about Kings in your history-book you will find that size has nothing to do with Kingliness. I have heard, indeed, that some of them were very puny little fellows, in mind as well as in body.

If it is courage that makes a king then I have the right to be called Kingbird. They say I have a reckless sort of courage, because I attack birds a great deal larger than myself.

I would not call it courage to attack anything smaller than myself, would you? A big man finds it easy to shoot a little bird in the air; and a big boy does not need to be brave to kill or cripple some poor little animal that crosses his path. He only needs to be a coward to do that!

I only attack my enemies,—the Hawks, Owls, Eagles, Crows, Jays, and Cuckoos. They would destroy my young family if I did not drive them away. Mr. Crow especially is a great thief. When my mate is on her nest I keep a sharp lookout, and when one of my enemies approaches I give a shrill cry, rise in the air, and down I pounce on his back; I do this more than once, and how I make the feathers fly!

The little hawks and crows I never attack, and yet they call me a bully. Sometimes I do go for a Song-bird or a Robin, but only when they come too near my nest. People wonder why I never attack the cunning Catbird. I'll never tell them, you may be sure!

To what family do I belong? To a large family called Flycatchers. Because some Kings are tyrants I suppose, they call me the Tyrant Flycatcher. Look for me next summer on top of a wire fence or dead twig of a tree, and watch me, every few minutes, dash into the air, seize a passing insect, and then fly back to the same perch again.

Any other names? Yes, some folks call me the Bee Bird or Bee Martin. Once in awhile I change my diet and do snap up a bee! but it is always a drone, not a honey-bee. Some ill-natured people say I choose the drones because they can't sting, and not because they are tramp bees and will not work.

Sing? Yes, when my mate is on her nest I please her with a soft pretty song, at other times my call-note is a piercing-Kyrie-K-y-rie! I live with you only in the summer. When September comes I fly away to a warmer climate.

SUMMARY

Page 123.

BLACKBURNIAN WARBLER.—*Dendroica blackburniæ.*

RANGE—Eastern North America; breeds from northern Minnesota and southern Maine northward to Labrador and southward along the Alleghanies to South Carolina; winters in the tropics.

NEST—Of fine twigs and grasses, lined with grasses and tendrils, in coniferous trees, ten to forty feet up.

EGGS—Four, grayish white or bluish white, distinctly and obscurely spotted, speckled, and blotched with cinnamon brown or olive brown.

Page 128.

AMERICAN GOLDFINCH.—*Spinus tristis.* Other names: "Yellow-bird," "Thistle-bird."

RANGE—Eastern North America; breeds from South Carolina to southern Labrador; winters from the northern United States to the Gulf.

NEST—Externally, of fine grasses, strips of bark and moss, thickly lined with thistle down; in trees or bushes, five to thirty feet up.

EGGS—Three to six, pale bluish white.

Page 131.

CHIMNEY SWIFT. — *Chætura pelagica.* Other name: "Chimney Swallow."

RANGE—Eastern North America; breeds from Florida to Labrador; winters in Central America.

NEST—A bracket-like basket of dead twigs glued together with saliva, attached to the wall of a chimney, generally about ten feet from the top, by the gummy secretions of the bird's salivary glands.

EGGS—Four to six, white.

Page 135.

HORNED LARK. — *Otocoris alpestris.* Other name: "Shore Lark."

RANGE—Breeds in northern Europe, Greenland, Newfoundland, Labrador, and Hudson Bay region; southward in winter into eastern United States to about latitude 35°

NEST—Of grasses, on the ground.

EGGS—Three or four, pale bluish or greenish white, minutely and evenly speckled with pale grayish brown.

Page 140.

SAPSUCKER, YELLOW-BELLIED.—*Sphyrapicus varius.*

RANGE—Eastern North America; breeds from Massachusetts northward, and winters from Virginia to Central America.

NEST—About forty feet from the ground.

EGGS—Five to seven.

Page 141.

WARBLING VIREO.—*Vireo gilvus.* Other name: "Yellow-throated Vireo."

RANGE—North America; breeds as far north as the Hudson Bay region; winters in the tropics.

NEST—Pensile, of grasses and plant fibres, firmly and smoothly interwoven, lined with fine grasses, suspended from a forked branch eight to forty feet up.

EGGS—Three or four, white, with a few specks or spots of black umber, or rufous brown, chiefly about the larger end.

Page 146.

WOOD PEWEE.—*Contopus Virens.*

RANGE—Eastern North America; breeds from Florida to Newfoundland; winters in Central America.

NEST—Compact and symmetrical, of fine grasses, rootlets and moss, thickly covered with lichens, saddled on a limb, twenty to forty feet up.

EGGS—Three or four, white, with a wreath of distinct and obscure markings about the larger end.

Page 150.

SNOWFLAKE—*Plectrophenax nivalis.* Other name: "Snow Bunting."

RANGE—Northern parts of northern hemisphere, breeding in the arctic regions; in North America, south in Winter into the northern United States, irregularly to Georgia, southern Illinois, and Kansas.

NEST—Of grasses, rootlets, and moss, lined with finer grasses and feathers, on the ground.

EGGS—Four to seven, pale bluish white, thinly marked with umber or heavily spotted or washed with rufous-brown.

Page 153.

JUNCO—*Junco hyemalis.* Other name: "Snowbird."

RANGE—North America; breeds from northern Minnesota to northern New York and southward along the summits of the Alleghanies to Virginia; winters southward to the Gulf States.

NEST—Of grasses, moss, and rootlets, lined with fine grasses and long hairs, on or near the ground.

EGGS—Four or five, white or bluish white, finely or evenly speckled or spotted, sometimes heavily blotched at the larger end with rufous-brown.

Page 158.

KINGBIRD.—*Tyrannus tyrannus.*

RANGE—North America north to New Brunswick and Manitoba; rare west of the Rocky Mountains; winters in Central and South America.

NEST—Compact and symmetrical, of weedstocks, grasses, and moss, lined with plant down, fine grasses and rootlets, generally at the end of a branch fifteen to twenty-five feet from the ground.

EGGS—Three to five, white, spotted with umber.

BIRDS.

ILLUSTRATED BY COLOR PHOTOGRAPHY.

VOL. II. NOVEMBER. No. 5.

JOHN JAMES AUDUBON.

JOHN JAMES AUDUBON has always been a favorite with the writer, for the invincibleness of his love of Nature and of birds is only equaled by the spontaneous freshness of his style, springing from an affectionate and joyous nature. Recently there was found by accident, in an old calf-skin bound volume, an autobiography of the naturalist. It is entitled "Audubon's Story of his Youth," and would make a very pretty book. As introductory to the diaries and ornithological biographies of the birds, it would be very useful.

Two or three incidents in the life of this fascinating character are interesting as showing the influence of the accidental in ultimate achievement.

"One incident," he says, "which is as perfect in my memory as if it had occured this very day, I have thought thousands of times since, and will now put on paper as one of the curious things which perhaps did lead me in after times to love birds, and to finally study them with pleasure infinite. My mother had several beautiful parrots, and some monkeys; one of the latter was a full-grown male of a very large species. One morning, while the servants were engaged in arranging the room I was in, 'Pretty Polly' asking for her breakfast as usual, '*Du pain au lait pour le perroquet Mignonne*,' (bread and milk for the parrot Mignonne,) the man of the woods probably thought the bird presuming upon his rights in the scale of nature; be this as it may, he certainly showed his supremacy in strength over the denizen of the air, for, walking deliberately and uprightly toward the poor bird, he at once killed it, with unnatural composure. The sensations of my infant heart at this cruel sight were agony to me. I prayed the servant to beat the monkey, but he, who for some reason, preferred the monkey to the parrot, refused. I uttered long and piercing cries, my mother rushed into the room; I was tranquilized; the monkey was forever afterward chained, and Mignonne buried with all the pomp of a cherished lost one. This made, as I have said, a very deep impression on my youthful mind."

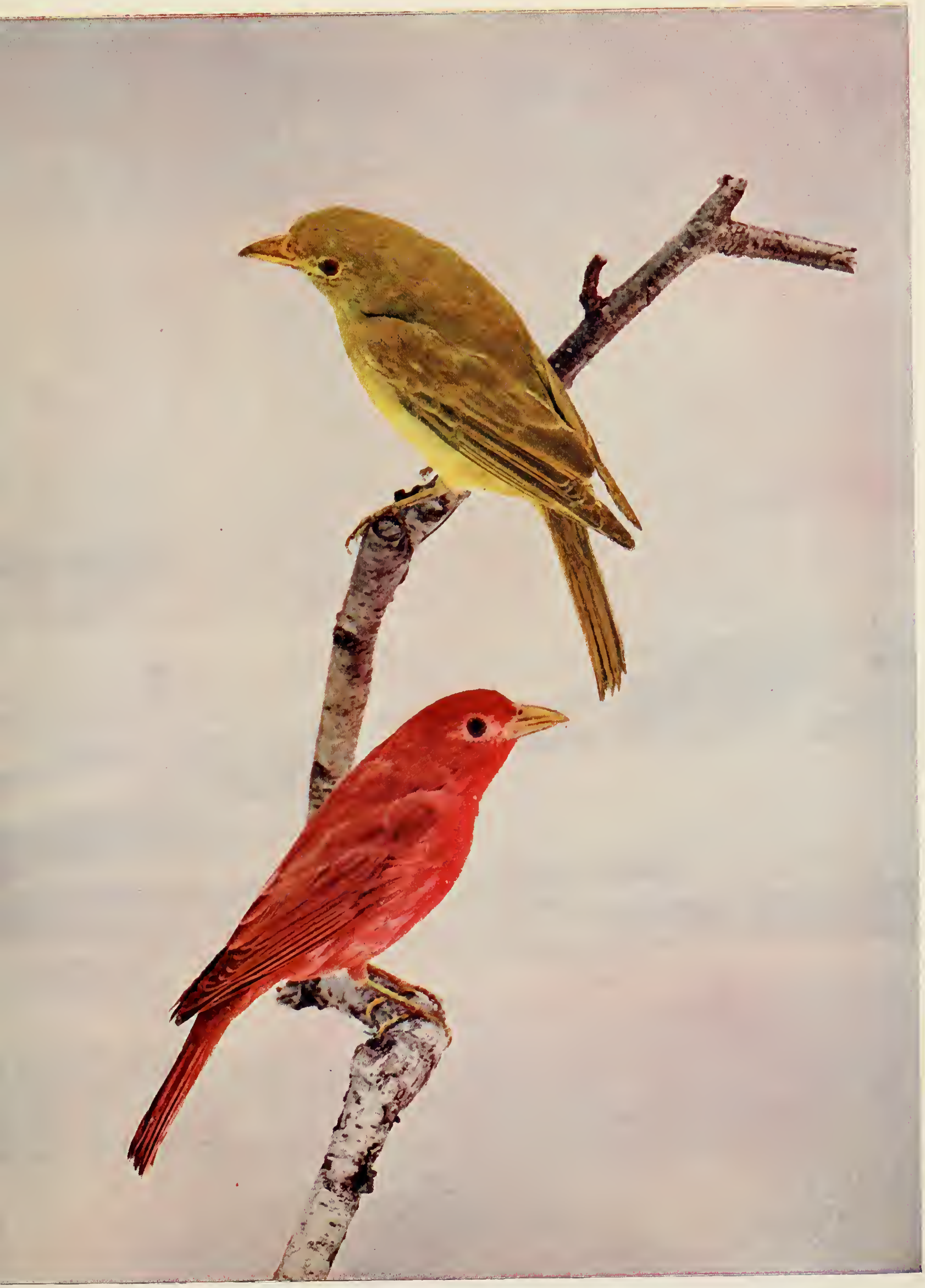
In consequence of the long absences of his father, who was an admiral in the French navy, the young naturalist's education was neglected, his mother suffering him to do much as he pleased, and it was not to be wondered at, as he says, that instead of applying closely to his studies, he preferred associating with boys of his own age and disposition, who were more fond of going in search of bird's nests, fishing, or shooting, than of better studies. Thus almost every day, instead of going to school, he usually made for the fields where he spent the day, returning with his little basket filled with what he called curosities, such as birds' nests, birds' eggs, curious lichens, flowers of all sorts, and even pebbles gathered along the shore of some rivulet. Nevertheless, he did study drawing and music, for which he had some talent. His subsequent study of drawing under the celebrated David, richly equipped him for a work which he did not know was ever to be his, and enabled him to commence a series of drawings of birds of France, which he continued until he had upwards of two hundred completed. "All bad enough," he says, "yet they were representations of birds, and I felt pleased with them." Before sailing for France, he had begun a series of drawings of the birds of America, and had also begun a study of their habits. His efforts were commended by one of his friends, who assured him the time might come when he should be a great American naturalist, which had such weight with him that he felt a certain degree of pride in the words, even then, when he was about eighteen years of age.

"The store at Louisville went on prosperously, when I attended to it; but birds were birds then as now, and my thoughts were ever and anon turning toward them as the objects of my greatest delight. I shot, I drew, I looked on nature only; my days were happy beyond human conception, and beyond this I really cared not." [How like Agassiz, who said he had not time to make money.] As he could not bear to give the attention required by his business, his business abandoned him. "Indeed, I never thought of business beyond the ever-engaging journeys which I was in the habit of taking to Philadelphia or New York, to purchase goods; those journeys I greatly enjoyed, as they afforded me ample means to study birds and their habits as I traveled through the beautiful, the darling forests of Ohio, Kentucky, and Pennsylvania." Poor fellow, how many ups and downs he had! He lost everything and became burdened with debt. But he did not despair for had he not a talent for drawing? He at once undertook to take portraits of the human head divine in black chalk, and thanks to his master, David, succeeded admirably. He established a large drawing school at Cincinnati, and formed an engagement to stuff birds for the museum there at a large salary.

"One of the most extraordinary things among all these adverse circumstances" he adds, "was, that I never for a day give up listening to the songs of our birds, or watching their peculiar habits, or delineating them in the best way I could; nay, during my deepest troubles, I frequently would wrench myself from the persons around me and retire to some secluded part of our noble forests; and many a time, at the sound of the wood-thrushes' melodies, have I fallen on my knees and there prayed earnestly to our God. This never failed to bring me the most valuable of thoughts, and always comfort, and it was often necessary for me to exert my will and compel myself to return to my fellow-beings."

Do you not fancy that Audubon was himself a *rara avis* and worthy of admiration and study?

Such a man, in the language of a contemporary, should have a monument in the old Creole country in which he was born, and whose birds inspired his childish visions. It should be the most beautiful work possible to the sculptor's art, portraying Audubon in the garb he wore when he was proud and happy to be called the "American Woodman," and at his feet should stand the Eagle which he named the "Bird of Washington," and near should perch the Mocking Bird, as once, in his description, it flew and fluttered and sang to the mind's eye and ear from the pages of the old reading book. C. C. MARBLE.



m col. F. M. Woodruff.

SUMMER TANAGER
½ Life-size.

Copyrighted by
Nature Study Pub. Co., 1897, Chicago.

THE SUMMER TANAGER.

THE TANAGERS are birds of such uncommon beauty that when we have taken the pictures of the entire family the group will be a notable one and will add attractiveness to the portfolio. [See Vol. I, pp. 31 and 215.] This specimen is also called the Summer Redbird or Rose Tanager, and is found pretty generally distributed over the United States during the summer months, wintering in Cuba, Central America, and northern South America. As will be seen, the adult male is a plain vermilion red. The plumage of the female is less attractive. In habits this species resembles the Scarlet Tanager, perhaps the most brilliant of the group, but is not so retiring, frequenting open groves and often visiting towns and cities.

The nesting season of this charming bird extends to the latter part of July, but varies with the latitude and season. Bark strips and leaves interwoven with various vegetable substances compose the nest, which is usually built on a horizontal or drooping branch, near its extremity and situated at the edge of a grove near the roadside. Davie says: "All the nests of this species which I have seen collected in Ohio are very thin and frail structures; so thin that the eggs may often be seen from beneath. A nest sent me from Lee county, Texas, is compactly built of a cottony weed, a few stems of Spanish moss, and lined with fine grass stems." Mr. L. O. Pindar states that nests found in Kentucky are compactly built, but not very thickly lined. The eggs are beautiful, being a bright, light emerald green, spotted, dotted, and blotched with various shades of lilac, brownish-purple, and dark brown.

Chapman says the Summer Tanager may be easily identified, not alone by its color but by its unique call-note, a clearly enunciated *chicky*, *tucky*, *tuck*. Its song bears a general resemblance to that of the Scarlet, but to some ears is much sweeter, better sustained, and more musical. It equals in strength, according to one authority, that of the Robin, but is uttered more hurriedly, is more "wiry," and much more continued.

The Summer Tanager is to a greater or less extent known to farmers as the Red Bee-Bird. Its food consists largely of hornets, wasps, and bees.

The male of this species requires several years to attain the full plumage. Immature individuals, it is said, show a mixture of red and yellow in relative proportions according to age. The female has more red than the male, but the tint is peculiar, a dull Chinese orange, instead of a pure rosy vermilion, as in the male.

An interesting study for many of our readers during the summer months when the Tanagers are gay in their full plumage, would be to seek out, with BIRDS in hand, the most attractive denizens of the groves, identifying and observing them in their haunts until the entire group, of which five species are represented in the United States, is made familiar. When we remember that there are about three hundred and eighty known species of Tanagers in Tropical America, it would seem a light task to acquaint oneself with the small family at home.

THE AMERICAN WHITE-FRONTED GOOSE.

"As stupid as a Goose!"

Yes, I know that is the way our family is usually spoken of. But then I'm not a tame Goose, you know. We wild fellows think we know a little more than the one which waddles about the duck-pond in your back yard.

He sticks to one old place all the time. Waddles and talks and looks the same year after year. We migratory birds, on the other hand, fly from place to place. Our summers are passed here, our winters there; so that we pick up a thing or two the common Goose never dreams of.

"The laughing Goose!"

Yes, some people call me that. I don't know why, unless my *Honk*, *honk*, *honk!* sounds like a laugh. Perhaps, though, it is because the look about my mouth is so pleasant.

Did you ever see a flock of us in motion, in October or November, going to our winter home?

Ah, that is a sight! When the time comes for us to start, we form ourselves into a figure like this > • a big gander taking the lead where the dot is. Such a *honk*, *honk*, *honking* you never heard. People who have heard us, and seen us, say it sounds like a great army overhead.

Where do we live in summer, and what do we eat?

You will find us throughout the whole of North America, but in greater numbers on the Pacific coast. The fresh-water lakes are our favorite resorts. We visit the wheat fields and corn fields, nibbling the young, tender blades and feeding on the scattered grain. The farmers don't like it a bit, but we don't care. That is the reason our flesh tastes so sweet.

And tough!

My, how you talk! It is only we old fellows that are tough, we fellows over a year old. But of course a great many people don't know that, or don't care.

Why, I once heard of a gander that had waddled around a barn-yard for five long years. Thanksgiving Day arrived, and they roasted him for dinner.

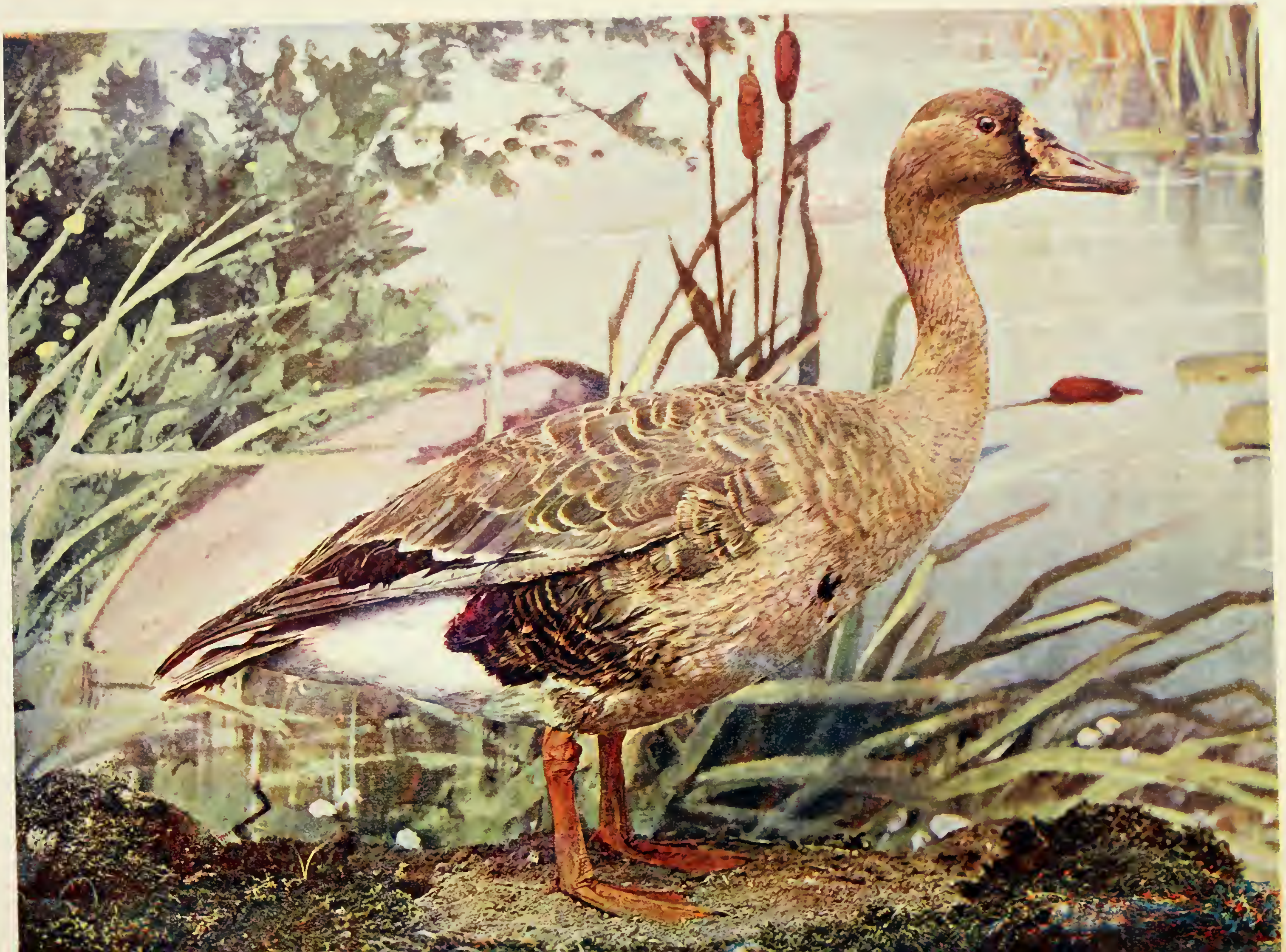
Think of eating an old, *old* friend like that!

Where do we build our nests?

Away up north, in Alaska, and on the islands of the Arctic Sea. We make them of hay, feathers, and down, building them in hollow places on the ground.

How many eggs?

Six. I am very good to my mate, and an affectionate father.



THE AMERICAN WHITE-FRONTED GOOSE.

WHITE-FRONTED or Laughing Geese are found in considerable numbers on the prairies of the Mississippi Valley. They are called Prairie Brant by market-men and gunners. Though not abundant on the Atlantic seaboard, vast flocks may be seen in the autumn months on the Pacific Slope. In Oregon and northern California some remain all winter, though the greater number go farther south. They appear to prefer the grassy patches along streams flowing into the ocean, or the tide-water flats so abundant in Oregon and Washington, where the Speckle-bellies, as they are called, feed in company with the Snow Geese. The nesting place of this favorite species is in the wooded districts of Alaska and along the Yukon river. No nest is formed, from seven to ten eggs being laid in a depression in the sand.

It is said that notwithstanding all references to their ungainly movement and doltish intellect, the Wild Goose, of which the White-fronted is one of the most interesting, is held in high estimation by the sportsman, and even he, if keen of observation, will learn from it many things that will entitle the species to advancement in the mental grade, and prove the truth of a very old adage, that you cannot judge of things by outward appearance. A goose, waddling around the barnyard, may not present a very graceful appearance, nor seem endowed with much intelligence, yet the ungainly creature, when in its natural state, has an ease of motion in flight which will compare with that of any of the feathered tribe, and shows a knowledge of the means of defense, and of escaping the attacks of its enemies, that few possess. There is probably no bird more cautious, vigilant, and fearful at danger than this. Should their suspicion be aroused, they rise upward slowly in a dense cloud of white, and sound their alarm notes, but they may not go over fifty yards before they alight again, so that the amusement of watching them may be continued without much toil or inconvenience.

The White-fronted Goose visits Illinois only during its migrations, coming some time in October or early in November, and returning in March or April. During its sojourn there it frequents chiefly open prairies, or wheat fields, where it nibbles the young and tender blades, and cornfields, where it feeds upon the scattered grains. In California, Ridgway says, it is so numerous in winter as to be very destructive of the growing wheat crop, and it is said that in the Sacramento and San Joaquin valleys, farmers often find it necessary to employ men by the month to hunt and drive them from the fields. This is most successfully accomplished by means of brush hiding places, or "blinds," or by approaching the flocks on horseback by the side of an ox which has been trained for the purpose.

The White-fronted Goose is greatly esteemed for the excellent quality of its flesh, which, by those who have learned to appreciate it, is generally considered superior to that of any other species. While the cruel pursuit of the bird, merely for purpose of sport ought not to be continued, appreciation of its value as food may well be encouraged.

THE TURNSTONE.

THIS small plover-like bird is found on the sea-coasts of nearly all countries; in America, from Greenland and Alaska to Chili and Brazil; more or less common in the interior along the shores of the Great Lakes and larger rivers.

It is generally found in company with flocks of the smaller species of Sandpipers, its boldly marked plumage contrasting with surroundings, while the Sandpipers mingle with the sands and unless revealed by some abrupt movement can hardly be seen at a little distance.

The name Turnstone has been applied to this bird on account of its curious habit of dexterously inserting its bill beneath stones and pebbles along the shore in quest of food, overturning them in search of the insects or prey of any kind which may be lurking beneath. It is found on smooth, sandy beaches, though more commonly about the base of rocky cliffs and cones. The eggs of horseshoe crabs are its particular delight.

In the nesting season the Turnstone is widely distributed throughout the northern portions of both continents, and wanders southward along the sea-coasts of all countries. In America it breeds commonly in the Barren Lands of the Arctic coasts and the Anderson River districts, on the Islands of Franklin and Liverpool bays, nesting in July. In the Hudson's Bay country the eggs are laid in June. The nest is a hollow scratched in the earth, and is lined with bits of grass.

The Turnstone is known by various names: "Brant Bird," "Bead Bird," "Horse-foot-Snipe," "Sand-runner," "Calico-back," "Chicaric" and "Chickling." The two latter names have reference to its rasping notes, "Calico-back," to the variegated plumage of the upper parts.

In summer the adults are oddly pied above with black, white, brown, and chestnut-red, but the red is totally wanting in winter. They differ from the true Plovers in the well developed hind-toe, and the strong claws, but chiefly in the more robust feet, without trace of web between the toes.

The eggs are greenish-drab in color, spotted, blotched, and dotted irregularly and thickly with yellowish and umber brown. The eggs are two or four, abruptly pyriform in shape.

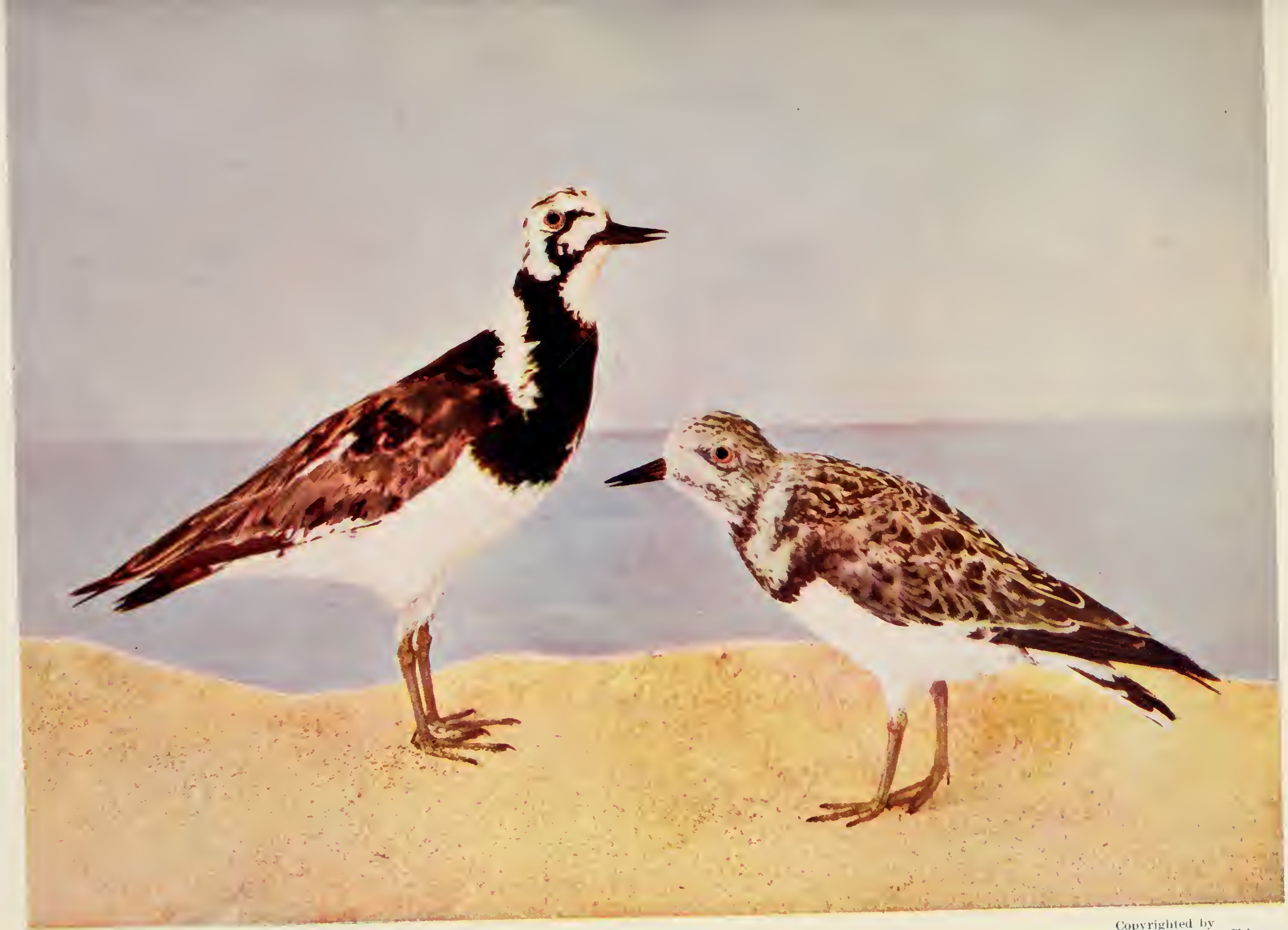
SNOWBIRDS.

Along the narrow sandy height
I watch them swiftly come and go,
Or round the leafless wood,
Like flurries of wind-driven snow,
Revolving in perpetual flight,
A changing multitude.

Nearer and nearer still they sway,
And, scattering in a circled sweep,
Rush down without a sound;
And now I see them peer and peep,
Across yon level bleak and gray,
Searching the frozen ground,—

Until a little wind upheaves,
And makes a sudden rustling there,
And then they drop their play,
Flash up into the sunless air,
And like a flight of silver leaves
Swirl round and sweep away.

ARCHIBALD LAMPMAN.



From col. F. M. Woodruff.

TURNSTONE.
½ Life-size.

Copyrighted by
Nature Study Pub. Co., 1897, Chicago.

BIRDS OF PASSAGE.

Black shadows fall
From the lindens tall,
That lift aloft their massive wall
Against the southern sky :

And from the realms
Of the shadowy elms,
A tide-like darkness overwhelms
The fields that round us lie.

But the night is fair
And everywhere
A warm, soft vapor fills the air
And distant sounds seem near ;

And above, in the light
Of the star-lit night,
Swift birds of passage wing their flight
Through the dewy atmosphere.

I hear the beat
Of their pinions fleet,
As from the land of snow and sleet
They seek a southern lea.

I hear the cry
Of their voices high
Falling dreamily through the sky,
But their forms I cannot see.

—LONGFELLOW.

THE BELTED PIPING PLOVER.

IN the Missouri river region and in contiguous parts of the interior of the United States, the Belted Piping Plover is a common summer resident, and is found along the shores of the great lakes, breeding on the flat, pebbly beach between the sand dunes and shore. It is the second of the ring-necked Plovers, and arrives in April in scattering flocks, which separate into pairs a month later. It strays at times into the interior, and has been known to breed on the borders of ponds many miles from the coast. In New England, however, it seldom wanders far from the shore, and prefers sand islands near the main land for its nesting haunts. Nelson says, that some thirty pairs, which were breeding along the beach at Waukegan, within a space of two miles, successfully concealed their nests, for which he made diligent search, although the birds were continually circling about or standing at a short distance, uttering an occasional note of alarm.

These birds have a soft, low, piping note, which they utter not only upon the wing, but occasionally as they run about upon the ground, and, during the early nesting season, a peculiar, loud, prolonged, musical call, that readily attracts attention. In other respects, their habits are not noticeably differed from the Semi-palmated. (See July BIRDS, p. 8.)

Their nests are without lining, a mere depression in the sand. The eggs are usually four, light gray to creamy buff, finely and rather sparsely speckled or dotted with blackish brown and purplish gray.

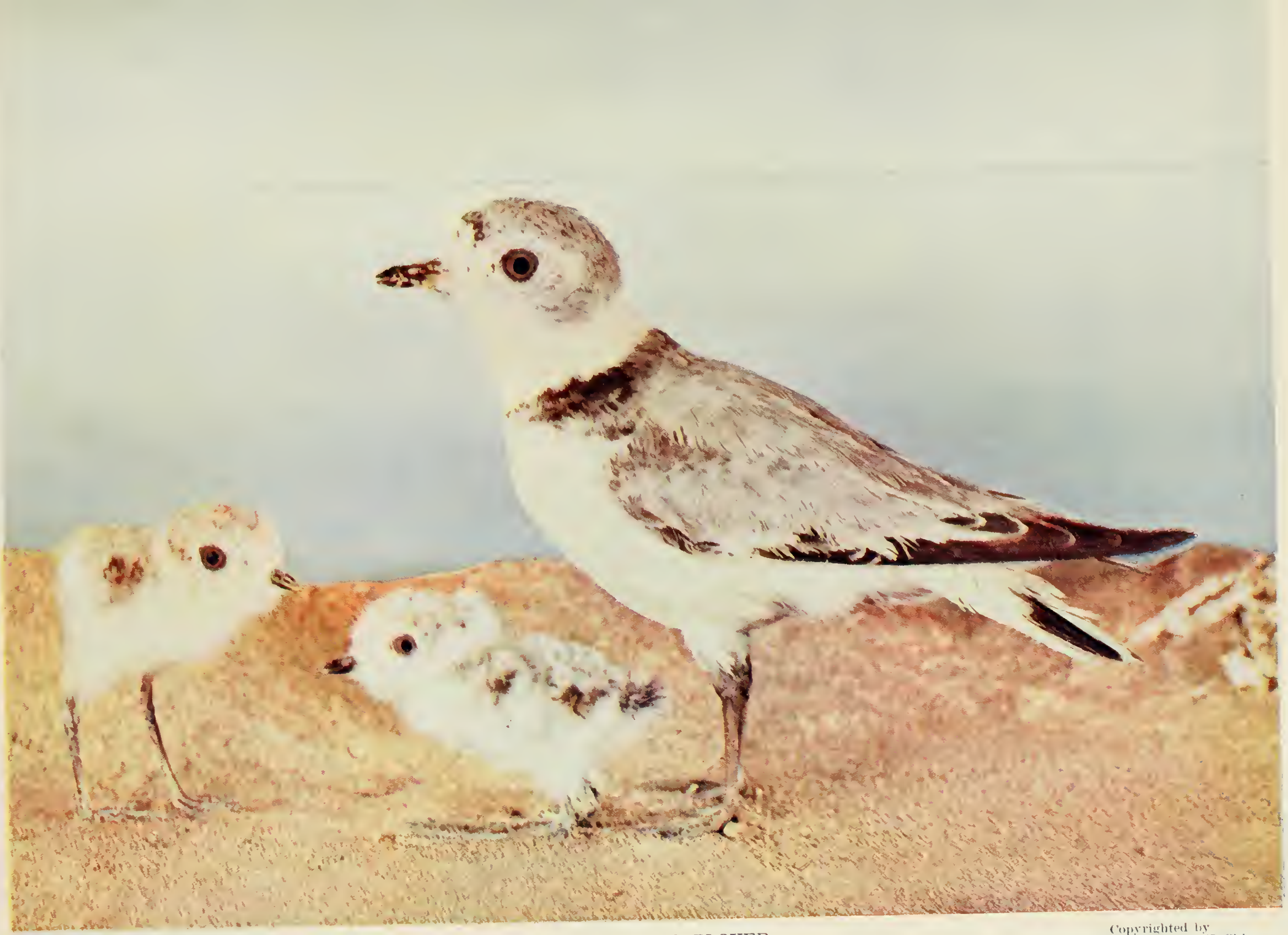
The female Belted Piping Plover is similar to the male, but with the dark colors lighter and less in extent. The young have no black band in front, while the collar around the neck is ashy brown.

These interesting and valuable game birds are found associated with various beach birds and Sand-Pipers, and they become exceedingly fat during the latter part of the summer.

All the Plovers have a singular habit when alighting on the ground in the nesting time; they drop their wings, stand with their legs half bent, and tremble as if unable to support their bodies. In this absurd position they will stand, according to a well-known observer, for several minutes, uttering a curious sound, and then seem to balance themselves with great difficulty. This singular manœuvre is no doubt intended to produce a belief that they may be easily caught, and thus turn the attention of the egg-gatherer from the pursuit of the eggs to themselves, their eggs being recognized the world over, as a great delicacy.

The Plover utters a piping sound
While on the wing or on the ground;
All a tremble it drops its wings,
And, with legs half bent, it sings:
"My nest is near, come take the eggs,
And take me too,—I'm off my legs."
In vain men search with eager eyes,
No nest is found, the Plover flies!

—C. C. M



From col. F. M. Woodruff.

BELTED PIPING PLOVER.
⅞ Life-size.

Copyrighted by
Nature Study Pub. Co., 1897, Chicago.

THE WILD TURKEY.

IT has been observed that when the Turkey makes its appearance on table all conversation should for the moment be suspended. That it is eaten in silence on some occasions may be inferred from the following anecdote: A certain judge of Avignon, famous for his love of the glorious bird, which the American people have wisely selected for the celebration of Thanksgiving Day, said to a friend: "We have just been dining on a superb Turkey. It was excellent. Stuffed with truffles to the very throat—tender, delicate, filled with perfume! We left nothing but the bones!" "How many were there of you?" asked his friend. "Two," replied the judge, "the Turkey—and myself!" The reason, no doubt, why this brilliant bird, which so much resembles the domestic Turkey, is now almost extinct. It was formerly a resident of New England, and is still found to some extent as far north-west as the Missouri River and south-west as Texas. In Ohio it was formerly an abundant resident. Dr. Kirtland (1850) mentions the time when Wild Turkeys were more common than tame ones are now.

The nests of this bird are very difficult to discover, as they are made on the ground, midst tall, thick weeds or tangled briars. The female will not leave the nest until almost trodden upon. It is stated that when the eggs are once touched, she will abandon her nest.

The Turkey became known to Europeans almost immediately upon the discovery of America by the Spaniards in 1518, and it is probable that it is distinctively an American bird. In its wild state, its plumage, as in the case of the Honduras Turkey, grows more lustrous and magnificent as the family extends southward.

The "Gobblers," as the males are called, associate in parties of ten to one hundred, seeking their food apart from the females, which wander singly with their young or in troops with other hens and their families, sometimes to the number of seventy or eighty. They travel on foot, unless disturbed by the hunter or a river compels them to take wing. It is said that when about to cross a river, they select a high eminence from which to start, that their flight may be more sure, and in such a position they sometimes remain for a day or more, as if in consultation. On such occasions the males gobble vociferously, strutting about pompously as if to animate their companions. At the signal note of their leader, they wing their way to the opposite shore.

The Wild Turkey feeds on many kinds of berries, fruits, and grasses, Beetles, tadpoles, young frogs, and lizards are sometimes found in its crop. When the Turkeys reach their destination, they disperse in flocks, devouring the mast as they proceed.

Pairing time begins in March. The sexes roost apart, but at no great distance, so that when the female utters a call, every male within hearing responds, rolling note after note in rapid succession, in a voice resembling that of the tame Turkey when he hears any unusual noise. Where the Turkeys are numerous, the woods from one end to the other, sometimes for many miles, resound with these voices of wooing.

The specimen of the Wild Turkey presented in this number of BIRDS is of extraordinary size and beauty, and has been much admired. The day is not far distant when a living specimen of this noble bird will be sought for in vain in the United States.

THE CERULEAN WARBLER.

THIS beautiful little sky-blue feathered creature is well named Azure Warbler, or again White-throated Blue Warbler, and is the most abundant of the genus here.

It is a bird of the wood, everywhere associated with the beautiful tall forests of the more northern counties of western New York, sometimes found in the open woods of pasture-lands, and quite partial to hardwood trees. In its flitting motion in search of insect-prey, and in the jerking curves of its more prolonged flight, as also in its structure, it is a genuine Wood Warbler and keeps for the most part to what Thoreau calls the "upper story" of its sylvan domain.

All Warblers, it has been said, depend upon their markings rather than song for their identity, which renders the majority of the tribe of greater interest to the scientist than to the novice. Until you have named four or five of the commonest species as landmarks, you will be considerably confused.

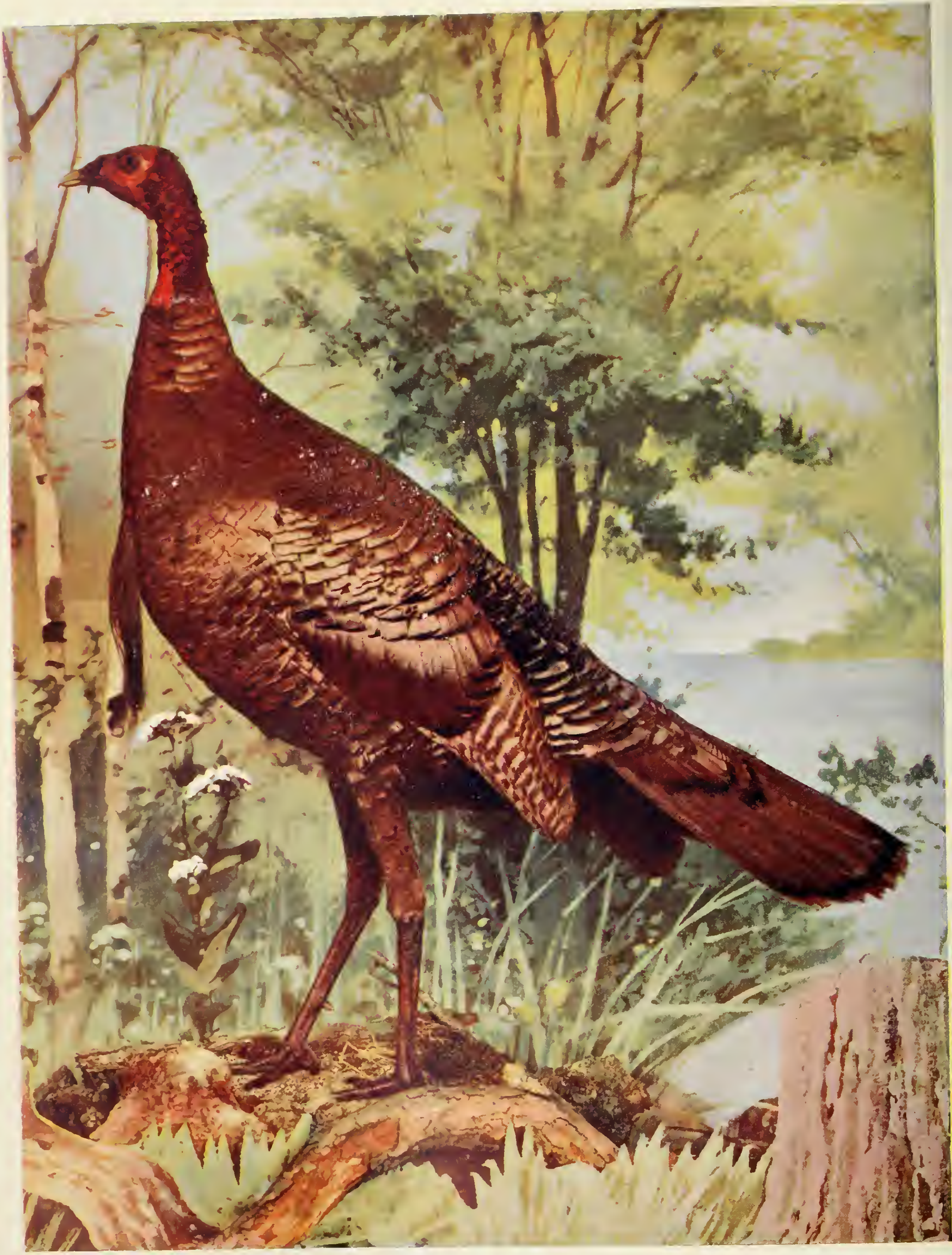
Audubon described the song of the Cerulean Warbler as "extremely sweet and mellow," whereas it is a modest little strain, says Chapman, or trill, divided into sylables like *zee*, *zee*, *zee*, *ze-ee-ee-eep*, or according to another observer, *rheet*, *rheet*, *rheet*, *rheet*, *ridi*, *idi*, *e-e-e-e-ee;* beginning with several soft warbling notes and ending in a rather prolonged but quite musical squeak. The latter and more rapid part of the strain, which is given in the upward slide, approaches an insect quality of tone which is more or less peculiar to all true Warblers, a song so common as to be a universal characteristic of our tall forests.

It is not strange that the nest of this species has been so seldom discovered, even where the bird is very abundant during the breeding season. It is built in the higher horizontal branches of forest trees, always out some distance from the trunk, and ranging from twenty to fifty feet above the ground. One described by Dr. Brewer, found in Ontario, near Niagara Falls, was built in a large oak tree at the height of fifty or more feet from the ground. It was placed horizontally on the upper surface of a slender limb between two small twigs; and the branch on which it was thus saddled was only an inch and a half in thickness, being nine feet from the trunk of the tree. The abandoned home was secured with great difficulty.

The nest is a rather slender fabric, somewhat similar to the nest of the Redstart, and quite small for the bird, consisting chiefly of a strong rim firmly woven of strips of fine bark, stems of grasses, and pine needles, bound round with flaxen fibres of plants and wool. Around the base a few bits of hornets' nests, mosses, and lichens are loosely fastened. The nest within is furnished with fine stems and needles, the flooring very thin and slight.

The bird is shy when started from the nest, and has a sharp chipping alarm-note common to the family.

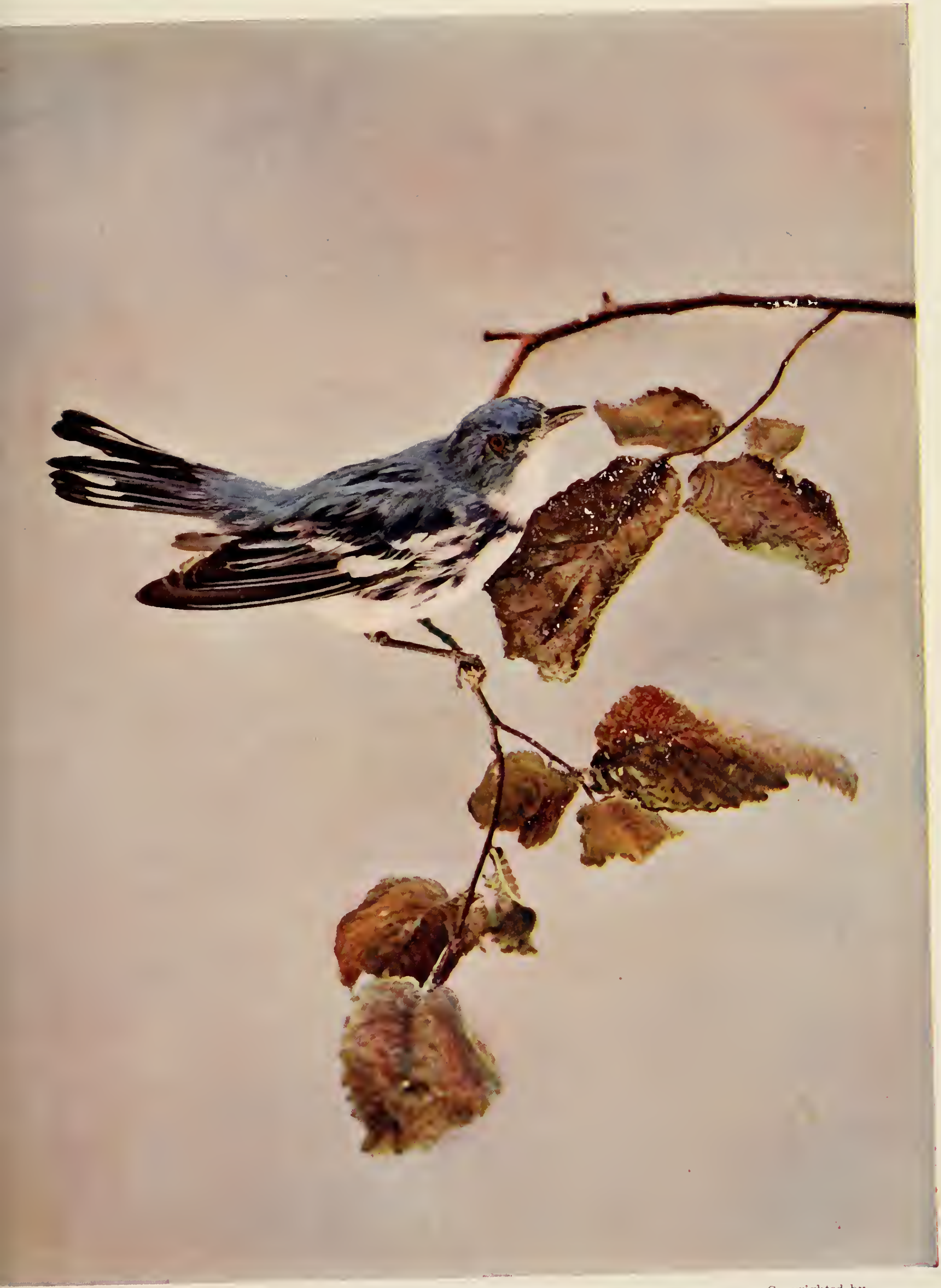
The Cerulean Warbler is found in the Eastern States, but is more numerous west of the Allegheny mountains, and throughout the heavily wooded districts of the Mississippi valley. In winter it migrates to Central America and Cuba. The Warblers are of unfailing interest to the lover of bird life. Apart from the beauty of the birds themselves, with their perpetually contrasting colors among the green leaves, their pretty ways furnish to the silent watcher an ever changing spectacle of the innocent life in the tree-tops.



From col. Fred. Kaempter.

WILD TURKEY.
$^1/_5$ Life-size.

Copyrighted by
Nature Study Pub. Co., 1897, Chicago.



From col. F. M. Woodruff.

CERULEAN WARBLER.
7/8 Life-size.

Copyrighted by
Nature Study Pub. Co., 1897, Chicago.

THE WILD TURKEY.

I thought my picture would appear in this number of BIRDS. What would Thanksgiving be without a Turkey, I'd like to know.

The editor says that I am a bird of ex-traor-di-na-ry size and beauty. That word is as big as I am, but by spelling it, I guess you will understand.

I look as proud as a peacock, don't I? Well, I am just as proud. You ought to see me strut, and hear me talk when the hen-turkeys are around. Why, sometimes when there is a large troop of us in the woods you can hear us *gobble, gobble, gobble,* for many miles. We are so fond of talking to each other.

That is when we are about to set up housekeeping, you think.

Yes, in March and April. After the nests are made, and the little turkeys hatched out, we big, handsome fellows go off to ourselves. The hen-turkeys, with their young broods, do the same.

Sometimes there are as many as a hundred in our troop and seventy or eighty in theirs. We travel on foot, picking up food as we go, till we meet a man with a gun, or come to a wide river.

Then we have to fly.

In a flock? Oh, yes. We choose some high place from which to get a good start. There we all stay, sometimes a day or two, strutting about and talking big. It is *gobble, gobble gobble*, from morning till night. Just like one of your conventions, you know. After awhile our leader gives the signal and off we all fly to the opposite shore.

Did you ever see one of our nests? No? Well, they are not easily seen, though they are made on the ground. You see, we are cunning and build them among tall, thick weeds and tangled briars.

I hope, if you ever come across one, you will not touch it, because my mate would never return to it again, if you did.

What do we eat?

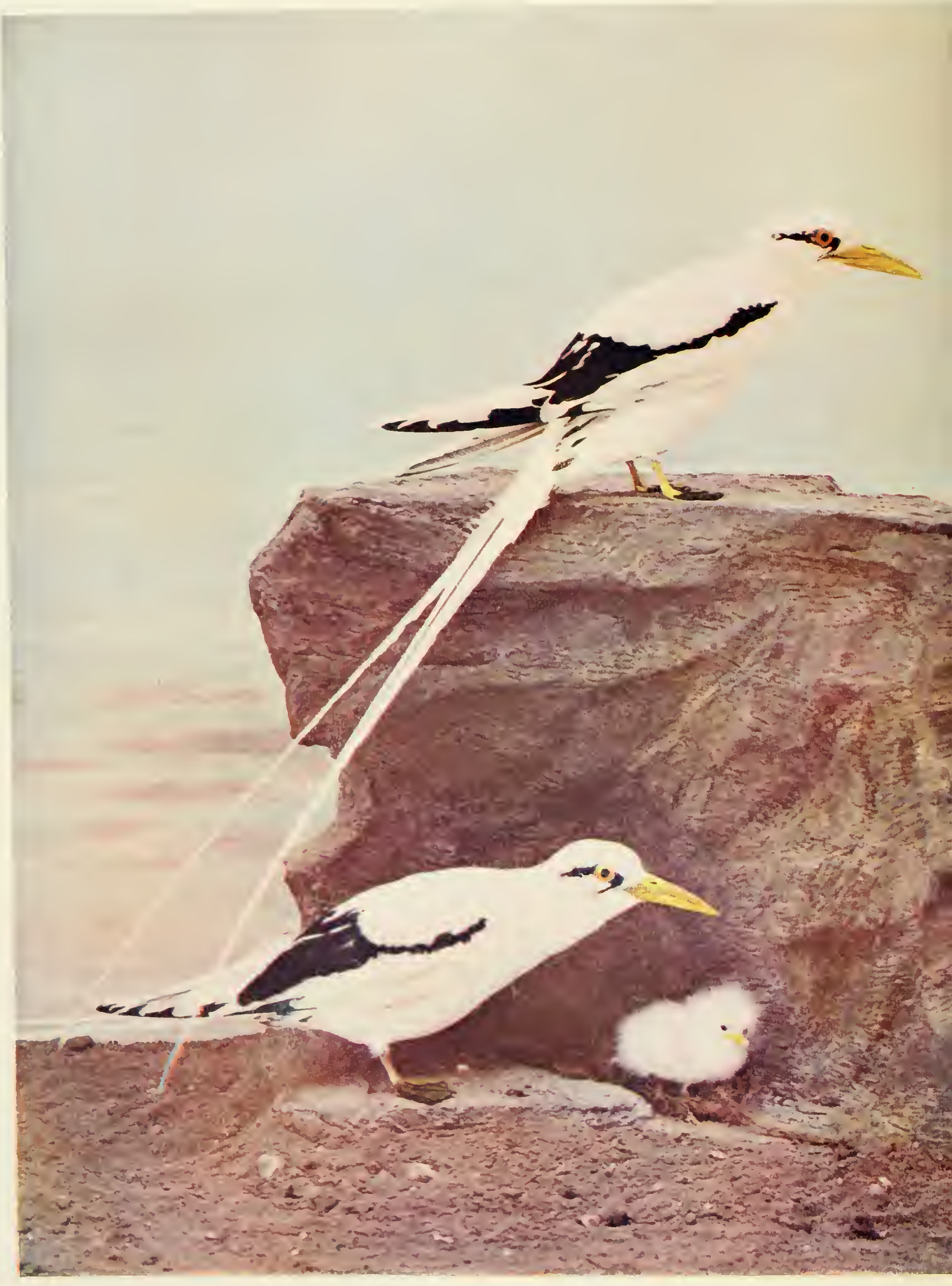
Berries, fruit and grasses, beetles, tadpoles, frogs and lizards. In fact anything we consider good.

THE YELLOW-BILLED TROPIC BIRD.

IN appearance this bird resembles a large Tern (see Vol. 1, page 103), and its habits are similar to those of the Terns. Intertopical, it is of a wandering disposition, breeding on the islands of mid-ocean thousands of miles apart. It is noted for its elegant, airy, and long-protracted flight. Davie says that on Bourbon, Mauritius and other islands east and south of Madagascar it breeds in the crevices of the rocks of inaccessible cliffs, and in hollow trees. In the Bermuda Islands it nests about the first of May in holes in high rocky places along the shores. Here its favorite resorts are the small islands of Great Sound, Castle Harbor, and Harrington Sound. The Phaeton, as it is felicitously called, nests in the Bahamas in holes in the perpendicular faces of cliffs and on the flat surfaces of rocks. A single egg is laid, which has a ground-color of purplish brownish white, covered in some specimens almost over the entire surface with fine reddish chocolate-colored spots.

These species compose the small but distinct family of tropic birds and are found throughout the tropical and subtropical regions of the world. Long journeys are made by them across the open sea, their flight when emigrating being strong, rapid, and direct, and immense distances are covered by them as they course undismayed by wind or storm. In feeding, Chapman says, they course over the water, beating back and forth at a height of about forty feet, and their long willowly tail-feathers add greatly to the grace and beauty of their appearance when on the wing. They are of rare and probably accidental occurrence on our coasts.

The Songs of Nature never cease,
Her players sue not for release
In nearer fields, on hills afar,
Attendant her musicians are:
From water brook or forest tree,
For aye comes gentle melody,
The very air is music blent—
An universal instrument.
—JOHN VANCE CHENEY.



From col. F. M. Woodruff.

YELLOW-BILLED TROPIC BIRD.
¼ Life-size.

Copyrighted by
Nature Study Pub. Co., 1897, Chicag

THE YELLOW-BILLED TROPIC BIRD.

The people who make a study of birds say that I look like a large Tern, and that my habits are like his.

I don't know whether that is so, I am sure, for I have no acquaintance with that bird, but you little folks can turn to your March number of Birds and see for yourselves if it is true.

For my part, I think I am the prettier of the two on account of my long, willowy tail feathers. They add greatly, it is said, to the grace and beauty of my appearance when on the wing. Then, the color of my coat is much more beautiful than his, I think, don't you think so, too?

We are not so common as the Terns, either, for they are very numerous. There are only three species of our family, so we consider ourselves quite distinct.

What are we noted for?

Well, principally for our long distance flights across the sea, elegant and airy, as the writers say of us. Maybe that is the reason they call us the Phaeton sometimes.

Do we go north in the summer as so many other birds do?

Ugh! You make me shudder. No, indeed! We never go farther north than Florida. Our home, or where we build our nests, is in the tropical and sub-tropical regions, where the weather is very warm, you know.

We are great wanderers and build our nests on islands, way out in the ocean many thousands of miles apart.

In trees?

Oh, no, but in any hole we see in the face of a great rock or cliff, and sometimes right on the top of a rock.

How many eggs?

Only one. That is the reason, you see, that our family remains small.

Sing?

Oh, my, no! We are not singing birds. We have a call-note, though harsh and gutteral, which sounds like *tip, tip, tip.*

THE EUROPEAN KINGFISHER.

RARELY indeed is this charming bird now found in England, where formerly it could be seen darting hither and thither in most frequented places. Of late years, according to Dixon, he has been persecuted so greatly, partly by the collector, who never fails to secure the brilliant creature for his cabinet at every opportunity, and partly by those who have an inherent love for destroying every living object around them. Gamekeepers, too, are up in arms against him, because of his inordinate love of preying on the finny tribe. Where the Kingfisher now is seen is in the most secluded places, the author adds, where the trout streams murmur through the silent woods, but seldom trod by the foot of man; or in the wooded gullies down which the stream from the mountains far above rushes and tumbles over the huge rocks, or lies in pools smooth as the finest mirror.

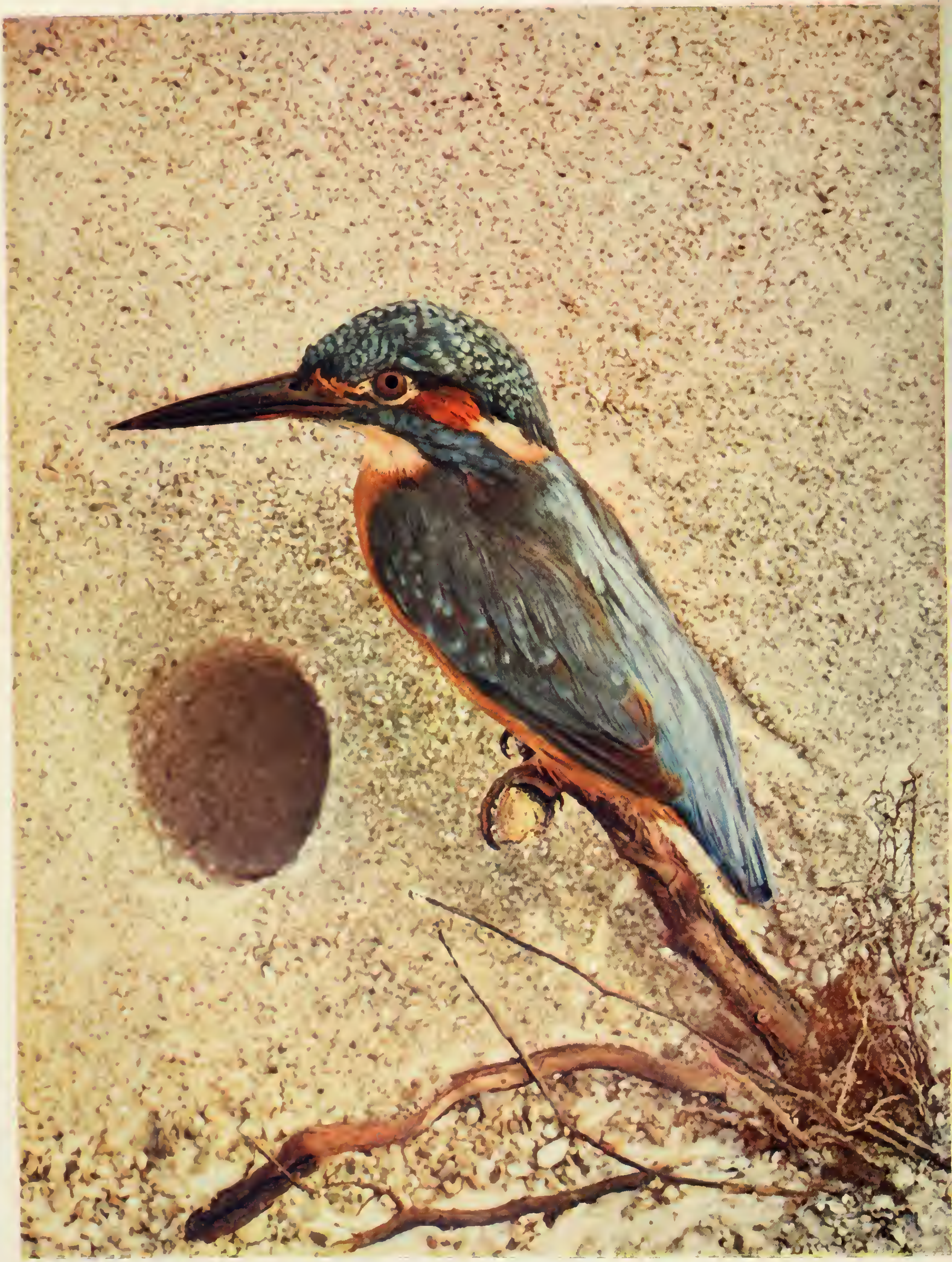
The Kingfisher is comparatively a silent bird, though he sometimes utters a few harsh notes as he flies swift as a meteor through the wooded glades. You not unfrequently flush the Kingfisher from the holes in the banks, and amongst the brambles skirting the stream. He roosts at night in holes, usually the nesting cavity. Sometimes he will alight on stumps and branches projecting from the water, and sit quiet and motionless, but on your approach he darts quickly away, often uttering a feeble *seep, seep*, as he goes.

The habits of the English Kingfisher are identical with those of the American, though the former is the more brilliant bird in plumage. (See BIRDS, Vol. I, p. 62.) The ancients had a very absurd idea as to its nesting habits. They believed that the bird built a floating nest, and whenever the old bird and her charge were drifted by the winds, as they floated over the briny deep, the sea remained calm. He was, therefore, to the ancient mariner, a bird held sacred in the extreme. Even now these absurd superstitions have not wholly disappeared. For instance, the nest is said to be made of the fish bones ejected by the bird, while the real facts are, that they not only nest but roost in holes, and it must follow that vast quantities of rejected fish bones accumulate, and on these the eggs are of necessity laid.

These eggs are very beautiful objects, being of a deep pinkish hue, usually six in number.

The food of the Kingfisher is not composed entirely of fish, the remains of fresh-water shrimps being found in their stomachs, and doubtless other animals inhabiting the waters are from time to time devoured.

The English Kingfisher, says Dixon, remains throughout the year, but numbers perish when the native streams are frozen. There is, perhaps, not a bird in all the ranks of the feathered gems of equatorial regions, be it ever so fair, the Humming-bird excepted, that can boast a garb so lovely as this little creature of the northland. Naturalists assert that the sun has something to do with the brilliant colors of the birds and insects of the tropics, but certainly, the Kingfisher is an exception of the highest kind. Alas, that he has no song to inspire the muse of some English bard!



From col. Chi. Acad. Sciences.

EUROPEAN KINGFISHER.
9/10 Life-size.

Copyrighted by
Nature Study Pub. Co., 1897, Chicago.

THE EUROPEAN KINGFISHER.

Little Folks:

I shouldn't have liked it one bit if my picture had been left out of this beautiful book. My cousin, the American Kingfisher, had his in the February number, and I find he had a good deal to say about himself in his letter, too.

Fine feathers make fine birds, they say. Well, if that is true, I must be a very fine bird, for surely my feathers are gay enough to please anybody—*I* think.

To see me in all my beauty, you must seek me in my native wood. I look perfectly gorgeous there, flitting from tree to tree. Or maybe you would rather see me sitting on a stump, gazing down into the clear pool which looks like a mirror.

"Oh, what a vain bird!" you would say; "see him looking at himself in the water;" when all the time I had my eye on a fine trout which I intended to catch for my dinner.

Well, though I wear a brighter dress than my American cousin, our habits are pretty much alike. I am sure he catches fish the same way I do—when he is hungry.

With a hook and line, as you do?

Oh, no; with my bill, which is long, you observe, and made for that very purpose. You should just see me catch a fish! Down I fly to a stump near the brook, or to a limb of a tree which overhangs the water, and there I sit as quiet as a mouse for quite a while.

Everything being so quiet, a fine speckled trout, or a school of troutlets, play near the surface. Now is my chance! Down I swoop, and up I come with a fish crosswise in my bill.

Back I go to my perch, toss the minnow into the air, and as it falls catch it head first and swallow it whole. I tell you this because you ought to know why I am called *Kingfisher*.

Do we swallow bones and all?

Yes, but we afterwards eject the bones, when we are resting or roosting in our holes in the banks of the stream. That must be the reason people who write about us say we build our nests of fish bones.

Sing?

Oh, no, we are not singing birds; but sometimes, when flying swiftly through the air, we give a harsh cry that nobody but a bird understands.

Your friend,
THE ENGLISH KINGFISHER.

THE VERMILION FLY-CATCHER.

THICKETS along water courses are favorite resorts of this beautiful Fly-catcher, which may be seen only on the southern border of the United States, south through Mexico to Guatemala, where it is a common species. Mr. W. E. D. Scott notes it as a common species about Riverside, Tucson, and Florence, Arizona. Its habits are quite similar to those of other Fly-catchers, though it has not been so carefully observed as its many cousins in other parts of the country. During the nesting season, the male frequently utters a twittering song while poised in the air, in the manner of the Sparrow Hawk, and during the song it snaps its bill as if catching insects.

The Vermilion's nest is usually placed in horizontal forks of ratana trees, and often in mesquites, not more then six feet from the ground; they are composed of small twigs and soft materials felted together, with the rims covered with lichens, and the shallow cavity lined with a few horse or cow hairs. Dr. Merrill states that they bear considerable resemblance to nests of the Wood Pewee in appearance and the manner in which they are saddled to the limb. Nests have been found, however, which lacked the exterior coating of lichens.

Three eggs are laid of a rich creamy-white with a ring of large brown and lilac blotches at the larger end.

A WINTER NEST.

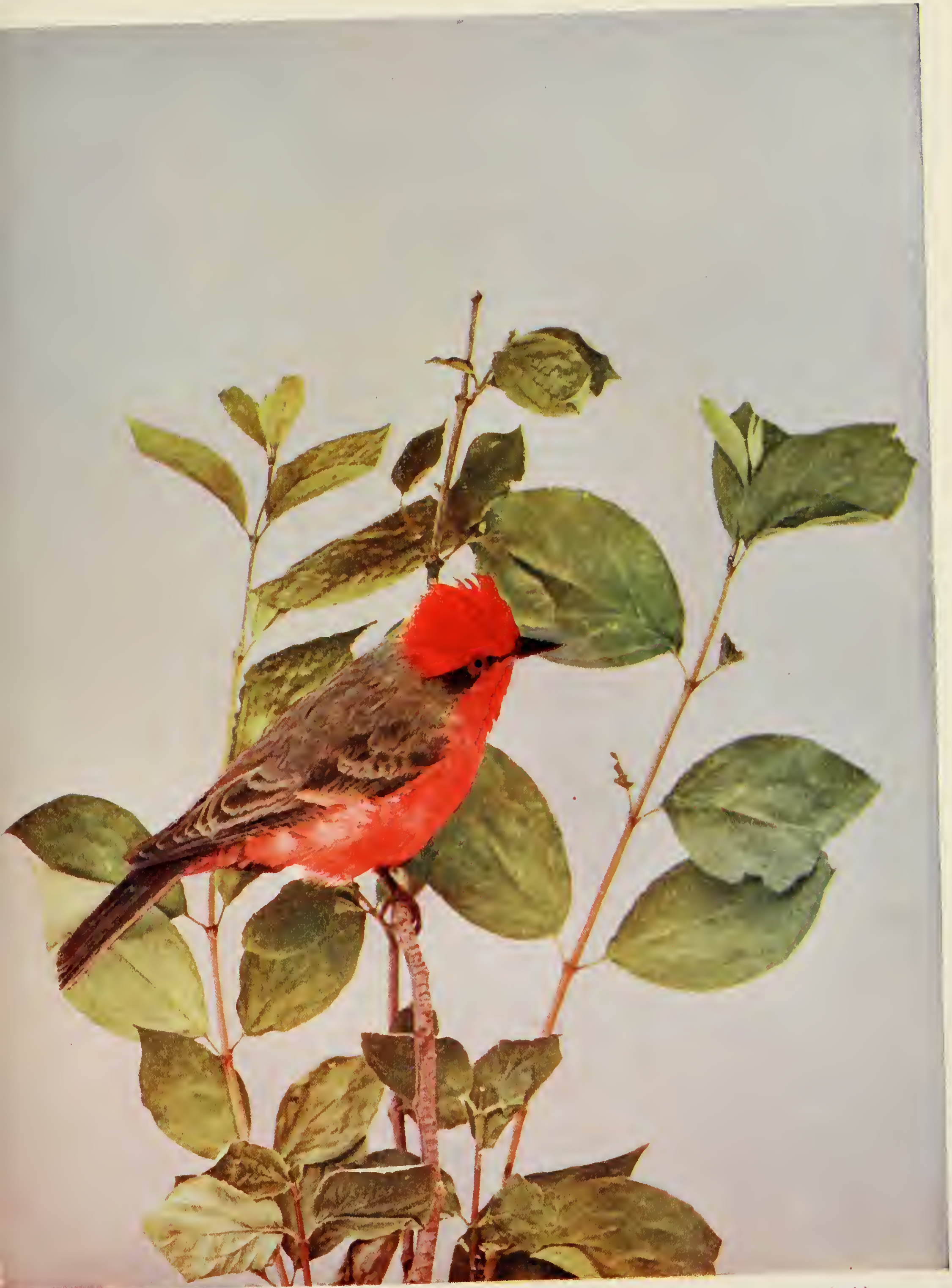
Pallid, wan-faced clouds
Press close to the frozen pines,
And follow the jagged lines
Of fence, that the sleet enshrouds.

Sharp in the face of the sky,
Gaunt, thin-ribbed leaves are blown ;
They rise with a shuddering moan,
Then sink in the snow and die.

At the edge of the wood a vine
Still clings to the sleeping beech,
While its stiffened tendrils reach
A nest, and around it twine.

A little gray nest all alone,
With its feathery lining of snow,
Where bleak winds, piping low,
Croon a sweet minor tone.

—NORA A. PIPER.



From col. George F. Breninger.

VERMILION FLYCATCHER.
3/5 Life-size.

Copyrighted by
Nature Study Pub. Co., 1897. Chicago.

BIRD MISCELLANY.

Red and yellow, green and brown,
Leaves are whirling, rustling down;
Acorn babes in their cradles lie,
Through the bare trees the brown birds fly;
The Robin chirps as he flutters past—
November days have come at last.

—CLARA LOUISE STRONG.

"I have watched birds at their singing under many and widely differing circumstances, and I am sure that they express joyous anticipation, present content, and pleasant recollection, each as the mood moves, and with equal ease."

—M. THOMPSON.

"The act of singing is evidently a pleasurable one; and it probably serves as an outlet for superabundant nervous energy and excitement, just as dancing, singing, and field sports do with us."

—A. R. WALLACE.

"The bird upon the tree utters the meaning of the wind—a voice of the grass and wild flower, words of the green leaf; they speak through that slender tone. Sweetness of dew and rifts of sunshine, the dark hawthorn touched with breadths of open bud, the odor of the air, the color of the daffodil—all that is delicious and beloved of spring-time are expressed in his song."

—RICHARD JEFFERIES.

THE LAZULI BUNTING.

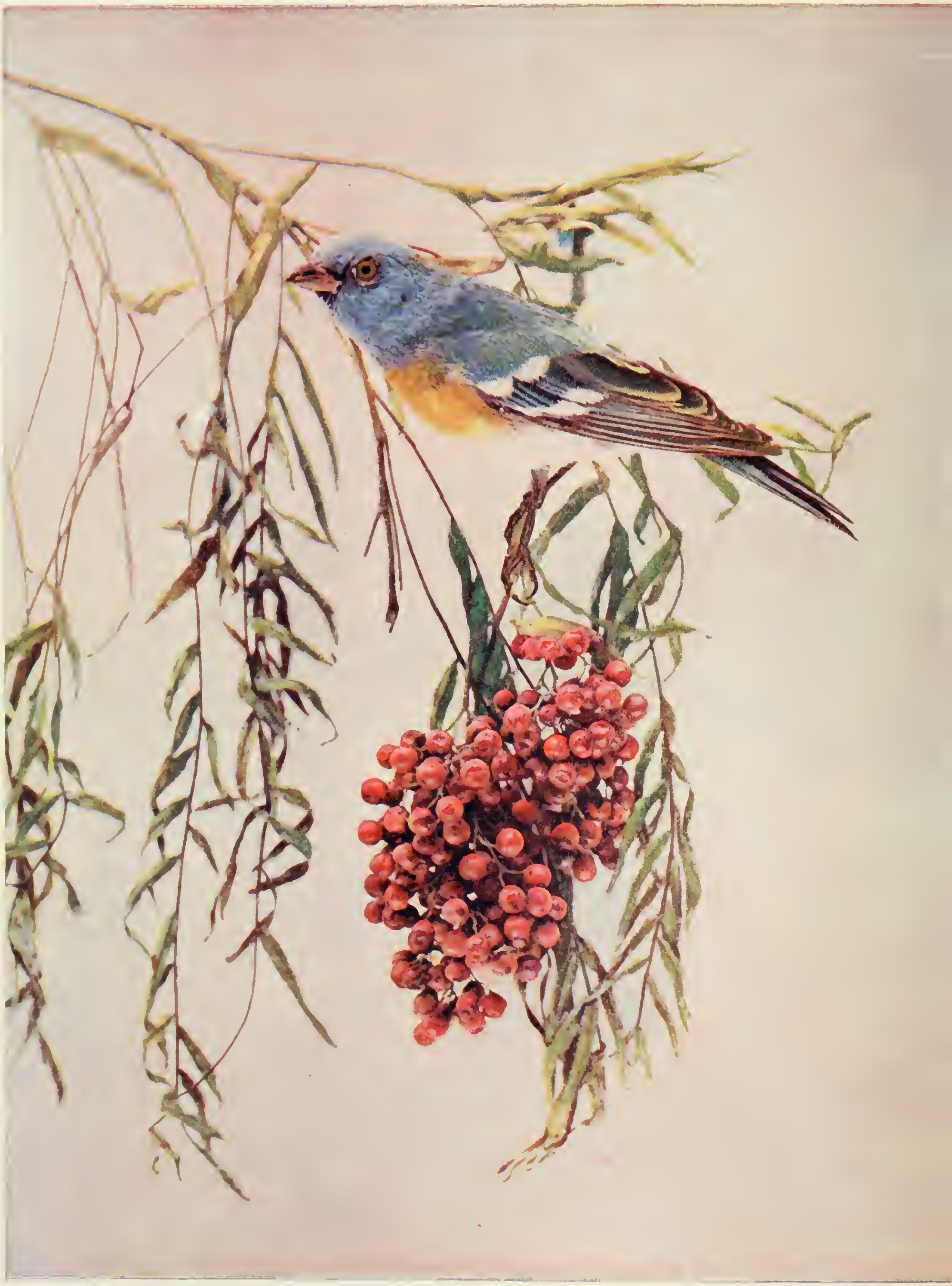
The joy is great of him who strays
In shady woods on summer days.
—MAURICE THOMPSON.

IN Colorado and Arizona the Lazuli Painted Finch, as it is called, is common, while in California it is very abundant, being, in fact, generally distributed throughout the west, and along the Pacific Coast it is found as far north as Puget Sound, during the summer. Davie says it replaces the Indigo Bunting, (See BIRDS, Vol. I, page 173,) from the Plains to the Pacific, being found in all suitable localities. The nest is usually built in a bush or in the lower limbs of trees, a few feet from the ground. Fine strips of bark, small twigs, grasses, and hair are used in preparing it for the four tiny, light bluish-green eggs, which readily fade when exposed to light. The eggs so closely resemble those of the Bluebird as not to be distinguishable with certainty. The nest is an inartistic one for a bird of gay plumage.

From Florence A. Merriam's charming book, "A-Birding on a Bronco," we select a description of the pretty manners of this attractive bird. She says:

"While waiting for the Woodpeckers, one day, I saw a small brownish bird flying busily back and forth to some green weeds. She was joined by her mate, a handsome blue Lazuli Bunting, even more beautiful than our lovely Indigo, and he flew beside her full of life and joy. He lit on the side of a cockle stem, and on the instant caught sight of me. Alas! he seemed suddenly turned to stone. He held onto that stalk as if his little legs had been bars of iron and I a devouring monster. When he had collected his wits enough to fly off, instead of the careless gay flight with which he had come out through the open air, he timidly kept low within the cockle field, making a circuitous way through the high stalks. He could be afraid of me if he liked, I thought, for after a certain amount of suspicion, an innocent person gets resentful; at any rate I was going to see that nest. Creeping up cautiously when the mother bird was away, so as not to scare her, and carefully parting the mallows, I looked in. Yes, there it was, a beautiful little sage-queen nest of old grass laid in a coil. I felt as pleased as if having a right to share the family happiness. After that I watched the small worker gather material with new interest, knowing where she was going to put it. She worked fast, but did not take the first thing she found, by any means. With a flit of the wing she went in nervous haste from cockle to cockle, looking eagerly about her. Jumping down to the ground, she picked up a bit of grass, threw it down dissatisfied, and turned away like a person looking for something. At last she lit on the side of a thistle, and tweaking out a fibre, flew with it to the nest.

"A month after the first encounter with the father Lazuli, I found him looking at me around the corner of a cockle stalk, and in passing back again, caught him singing full tilt, though his bill was full of insects! After we had turned our backs I looked over my shoulder and had the satisfaction of seeing him take his beakful to the nest. You couldn't help admiring him, for though not a warrior who would snap his bill over the head of an enemy of his home, he had a gallant holiday air with his blue coat and merry song, and you felt sure his little brown mate would get cheer and courage enough from his presence to make family dangers appear less frightful."



From col. John F. Ferry.

CHICAGO COLORTYPE CO

LAZULI BUNTING.
⅞ Life-size.

Copyrighted by
Nature Study Pub. Co., 1897, Chicago

THE LAZULI BUNTING.

You think you have seen me before? Well, I must admit my relative, the Indigo Bunting, and I *do* look alike. They say though, I am the prettier bird of the two. Turn to your March number, page 173, and decide for yourselves.

I live farther west than he does. You find him in the eastern and middle states. Then he disappears and I take his place, all the way from the Great Plains to the Pacific Ocean.

Some people call me the Lazuli Painted Finch. That's funny, for I never painted anything in my life—not even my cheeks. Would you like to know how my mate and I go to housekeeping? A lady who visits California, where I live, will tell you all about it. She rides a horse called Mountain Billy. He will stand still under a tree so that she can peep into nests and count the eggs, when the mother bird is away.

She can travel a good many miles in that way, and meet lots of birds. She says in her book, that she has got acquainted with seventy-five families, without robbing one nest, or doing the little creatures any harm.

Well, one day this lady saw a brownish bird flying busily back and forth to some tall green weeds. After a while a handsome blue Bunting flew along side of her, full of life and joy.

That was my mate and I. How frightened I was! for our nest was in those green weeds and not very far from the ground. I flew away as soon as I could pluck up courage, but not far, so that I could watch the lady and the nest. How my heart jumped when I saw her creep up, part the weeds and look in. All she saw was a few twigs and a sage-green nest of old grass laid in a coil. My mate hadn't put in the lining yet; you see it takes her quite a while to get the thistle down and the hair and strips of bark for the inside. The next time the lady passed, the house was done and my mate was sitting on the nest. She just looked down at us from the back of Mountain Billy and passed on.

Four weeks after, she came again, and there I was, flying about and singing "like a bird," my mouth full of insects, too. I waited 'till she had turned away before I flew to the nest to feed our little ones. I didn't know, you see, that she was such a good friend of ours, or I wouldn't have been so afraid.

SUMMARY

Page 163.

SUMMER TANAGER.—*Piranga rubra.* Other names: "Summer Red-bird," "Rose Tanager."

RANGE—Eastern United States west to the edge of the Plains; north regularly to about 40°—New Jersey, central Ohio, Illinois, casually north to Connecticut and Ontario, accidently to Nova Scotia, wintering in Cuba, Central America, and northern South America. (Davie.)

NEST—Of bark strips and leaves interwoven with various vegetable substances, on drooping branch of tree.

EGGS—Three or four, bluish white or greenish blue, with cinnamon or olive-brown markings.

Page 168.

AMERICAN WHITE-FRONTED GOOSE—*Anser albifrons gambeli.* Other names: "Laughing Goose," "Speckle Belly."

RANGE—North America, breeding far northward; in winter south to Mexico and Cuba, rare on the Atlantic coast.

NEST—On the ground, of grasses lined with down.

EGGS—Six or seven, dull greenish yellow with obscure darker tints.

Page 171.

TURNSTONE.—*Arenaria interpres.* Other names: "Brant Bird," "Calico-back," "Bead-bird," "Sand-runner," "Chickling," "Horse-foot Snipe"

RANGE—Nearly cosmopolitan; nests in the Arctic regions, and in America migrates southward to Patagonia. (Chapman.)

NEST—A slight depression on the ground.

EGGS—Two or four, greenish drab, spotted all over with brown.

Page 175.

THE BELTED PIPING PLOVER.—*Aegialitis meloda circumcincta.*

RANGE—Missouri river region; occasionally eastward to the Atlantic coast.

NEST—Depression in the sand without lining.

EGGS—Four, light gray to creamy buff, finely speckled with blackish brown and purplish gray.

Page 180.

WILD TURKEY—*Meleagris gallopava.*

RANGE—Eastern United States from Pennsylvania southward to Florida, west to Wisconsin, the Indian Territory and Texas.

NEST—On the ground, at the base of a bush or tree.

EGGS—Ten to fourteen, pale cream buff, finely and evenly speckled with grayish brown.

Page 181.

CERULEAN WARBLER—*Dendrœca caerulea.* Other names: "Azure Warbler;" "White-throated Blue Warbler."

RANGE—Mississippi valley as far north as Minnesota, and eastward as far as Lockport, N. Y. (Davison.) Winters in the tropics.

NEST—Of fine grasses bound with spider's silk, lined with strips of bark and with a few lichens attached to its upper surface, in a tree, twenty-five to fifty feet from the ground. (Chapman.)

EGGS—Four, creamy white, thickly covered with rather heavy blotches of reddish brown.

Page 186.

YELLOW-BILLED TROPIC BIRD.—*Phaethon flavirostris.* Other names: "Phaeton."

RANGE.—Tropical coasts; Atlantic coasts of tropical America, West Indies, Bahamas, Bermudas; casual in Florida and accidental in Western New York and Nova Scotia. (Chapman.)

NEST—In holes in the perpendicular faces of cliffs, also on the flat surfaces of rocks.

EGGS—One, ground color of purplish brownish white, covered with fine reddish chocolate-colored spots. (Davie.)

Page 190.

EUROPEAN KINGFISHER.—*Alcedo ispida.*

RANGE— England and portions of Europe.

NEST—In holes of the banks of streams.

EGGS—Usually six, of a deep pinkish hue.

Page 193.

VERMILION FLYCATCHER.—*Pyrocephalus rubineus mexicanus.*

RANGE—Southern Border of the United States south through Mexico and Guatemala.

NEST—In forks of ratana trees, not more than six feet up, of small twigs and soft materials felted together, the rims covered with lichens; the cavity is shallow.

EGGS—Usually three, the ground color a rich creamy white, with a ring of large brown and lilac blotches at the larger end.

Page 198.

LAZULI BUNTING.—*Passerina amoena.* Other name: "Lazuli Painted Finch."

RANGE—Western United States from the Great Plains to the Pacific; south in winter to Western Mexico.

NEST—In a bush or the lower limbs of trees, a few feet from the ground, of fine strips of bark, small twigs, grasses, and is lined with hair.

EGGS—Usually four, light bluish green.

BIRDS.

ILLUSTRATED BY COLOR PHOTOGRAPHY.

VOL. II. DECEMBER, 1897. NO. 6.

THE ORNITHOLOGICAL CONGRESS.

WE had the pleasure of attending the Fifeeenth Congress of the American Ornithologists' Union, which met and held its three days annual session in the American Museum of Natural History, New York City, November 9-11, 1897. Dr. C. Hart Merriam, of the Department of Agriculture, Washington, D. C., presided, and there were present about one hundred and fifty of the members, resident in nearly all the states of the Union.

The first paper read was one prepared by J. C. Merrill, entitled "In Memoriam: Charles Emil Bendire." The character, accomplishments, and achievements of the deceased, whose valuable work in biographizing American birds is so well known to those interested in ornithology, were referred to in so appropriate a manner that the paper, though not elaborate as it is to be hoped it may ultimately be made, will no doubt be published for general circulation. Major Bendire's services to American ornithology are of indisputable value, and his untimely death eclipsed to some extent, possibly wholly, the conclusion of a series of bird biographies which, so far as they had appeared, were deemed to be adequate, if not perfect.

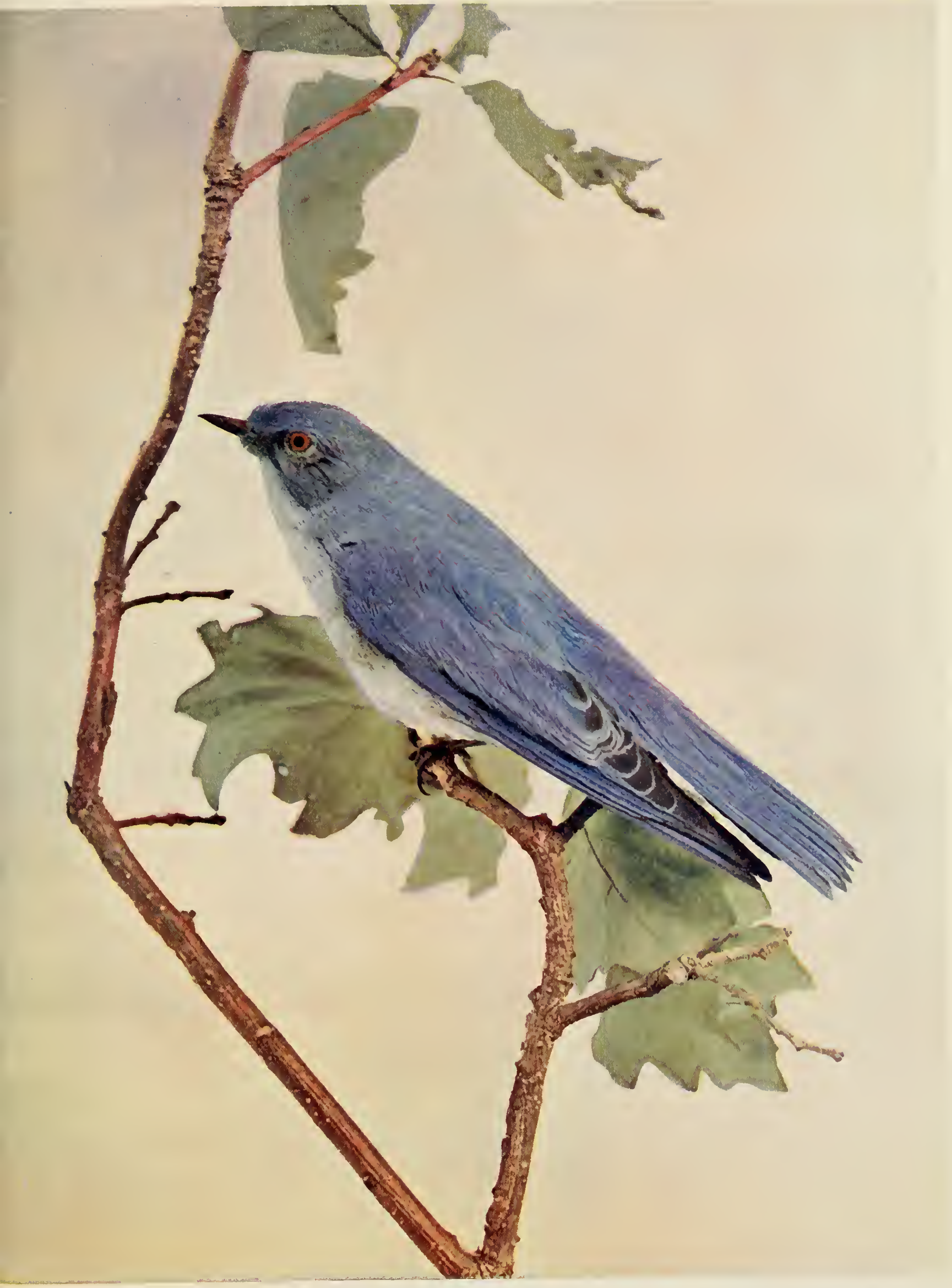
Mr. Frank M. Chapman, the well known authority on birds, and whose recent books are valuable additions to our literature, had, it may be presumed, a paper to read on the "Experiences of an Ornithologist in Mexico," though he did not read it. He made, on the contrary, what seemed to be an extemporaneous talk, exceedingly entertaining and sufficiently instructive to warrant a permanent place for it in the *Auk*, of which he is associate editor. We had the pleasure of examining the advance sheets of a new book from his pen, elaborately illustrated in color, and shortly to be published. Mr. Chapman is a comparatively young man, an enthusiastic student and observer, and destined to be recognized as one of our most scientific thinkers, as many of his published pamphlets already indicate. Our limited space precludes even a reference to them now. His remarks were made the more attractive by the beautiful stuffed specimens with which he illustrated them.

Prof. Elliott Coues, in an address, "Auduboniana, and Other Matters of Present Interest," engaged the delighted attention of the Congress on the morning of the second day's session. His audience was large. In a biographical sketch of Audubon the Man, interspersed with anecdote, he said so many interesting things that we regret we omitted to make any notes that would enable us to indicate at least something of his characterization. No doubt just what he said will appear in an appropriate place. Audubon's portfolio, in which his precious manuscripts and drawings were so long religiously kept, which he had carried with him to London to exhibit to possible publishers, a book so large that two men were required to carry it, though the great naturalist had used it as an indispensable and convenient companion for so many years, was slowly and we thought reverently divested by Dr. Coues of its wrappings and held up to the surprised and grateful gaze of the spectators. It was dramatic. Dr. Coues is an actor. And then came the comedy. He could not resist the inclination to talk a little—not disparagingly, but truthfully, reading a letter never before published, of Swainson to Audubon declining to associate his name with that of Audubon "under the circumstances." All of which, we apprehend, will duly find a place on the shelves of public libraries.

We would ourself like to say something of Audubon as a man. To us his life and character have a special charm. His was a beautiful youth, like that of Goethe. His love of nature, for which he was willing to make, and did make, sacrifices, will always be inspiring to the youth of noble and gentle proclivities ; his personal beauty, his humanity, his love-life, his domestic virtues, enthrall the ingenuous mind ; and his appreciation —shown in his beautiful compositions—of the valleys of the great river, *La Belle Riviere*, through which its waters, shadowed by the magnificent forests of Ohio and Kentucky, wandered—all of these things have from youth up shed a sweet fragrance over his memory and added greatly to our admiration of and appreciation for the man.

So many subjects came before the Congress that we cannot hope to do more than mention the titles of a few of them. Mr. Sylvester D. Judd discussed the question of "Protective Adaptations of insects from an Ornithological Point of View;" Mr. William C. Rives talked of "Summer Birds of the West Virginia Spruce Belt ;" Mr. John N. Clark read a paper entitled "Ten Days among the Birds of Northern New Hampshire ;" Harry C. Oberholser talked extemporaneously of "Liberian Birds," and in a most entertaining and instructive manner, every word he said being worthy of large print and liberal embellishment ; Mr. J. A. Allen, editor of *The Auk*, said a great deal that was new and instructive about the "Origin of Bird Migration;" Mr. O. Widmann read an interesting paper on "The Great Roosts on Gabberet Island, opposite North St. Louis;" J. Harris Reed presented a paper on "The Terns of Gull Island, New York ;" A. W. Anthony read of "The Petrels of Southern California," and Mr. George H. Mackay talked interestingly of "The Terns of Penikese Island, Mass."

There were other papers of interest and value. "A Naturalist's Expedition to East Africa," by D. G. Elliot, was, however, the *piece de resisiance* of the Congress. The lecture was delivered in the lecture hall of the Museum, on Wednesday at 8 p. m. It was illustrated by stereopticon views, and in the most remarkable manner. The pictures were thrown upon an immense canvas, were marvellously realistic, and were so much admired by the great audience, which overflowed the large lecture hall, that the word demonstrative does not describe their enthusiasm. But the lecture ! Description, experience, suffering, adventure, courage, torrid heat, wild beasts, poisonous insects, venomous serpents, half-civilized peoples, thirst,—almost enough of torture to justify the use of Coleridge's Ancient Mariner in illustration,—and yet a perpetual, quiet, rollicking, jubilant humor, all-pervading, and, at the close, on the lecturer's return once more to the beginning of civilization, the eloquent picture of the Cross, "full high advanced," all combined, made this lecture, to us, one of the very few platform addresses entirely worthy of the significance of unfading portraiture. —C. C. MARBLE.



From col. Chi. Acad. Sciences.

MOUNTAIN BLUE BIRD.
3/5 Life-size.

Copyrighted by
Nature Study Pub. Co., 1897, Chicago

THE MOUNTAIN BLUEBIRD.

IN an early number of BIRDS we presented a picture of the common Bluebird, which has been much admired. The mountain Bluebird, whose beauty is thought to excel that of his cousin, is probably known to few of our readers who live east of the Rocky Mountain region, though he is a common winter sojourner in the western part of Kansas, beginning to arrive there the last of September, and leaving in March and April. The habits of these birds of the central regions are very similar to those of the eastern, but more wary and silent. Even their love song is said to be less loud and musical. It is a rather feeble, plaintive, monotonous warble, and their chirp and twittering notes are weak. They subsist upon the cedar berries, seeds of plants, grasshoppers, beetles, and the like, which they pick up largely upon the ground, and occasionally scratch for among the leaves. During the fall and winter they visit the plains and valleys, and are usually met with in small flocks, until the mating season.

Nests of the Mountain Bluebird have been found in New Mexico and Colorado, from the foothills to near timber line, usually in deserted Woodpecker holes, natural cavities in trees, fissures in the sides of steep rocky cliffs, and, in the settlements, in suitable locations about and in the adobe buildings. In settled portions of the west it nests in the cornice of buildings, under the eaves of porches, in the nooks and corners of barns and outhouses, and in boxes provided for its occupation. Prof. Ridgway found the Rocky Mountain Bluebird nesting in Virginia City, Nevada, in June. The nests were composed almost entirely of dry grass. In some sections, however, the inner bark of the cedar enters largely into their composition. The eggs are usually five, of a pale greenish-blue.

The females of this species are distinguished by a greener blue color and longer wings, and this bird is often called the Arctic Bluebird. It is emphatically a bird of the mountains, its visits to the lower portions of the country being mainly during winter.

Heaped in the hollows of the grove, the autumn leaves lie dead;
They rustle to the eddying gust, and to the rabbits' tread.
The Robin and the Wren are flown, and from the shrubs the Jay,
And from the wood-top calls the Crow all through the gloomy day.
—BRYANT.

THE ENGLISH SPARROW.

"Oh, it's just a common Sparrow," I hear Bobbie say to his mamma, "why, I see lots of them on the street every day."

Of course you do, but for all that you know very little about me I guess. Some people call me "Hoodlum," and "Pest," and even "Rat of the Air." I hope you don't. It is only the folks who don't like me that call me ugly names.

Why don't they like me?

Well, in the first place the city people, who like fine feathers, you know, say I am not pretty; then the farmers, who are not grateful for the insects I eat, say I devour the young buds and vines as well as the ripened grain. Then the folks who like birds with fine feathers, and that can sing like angels, such as the Martin and the Bluebird and a host of others, say I drive them away, back to the forests where they came from.

Do I do all these things?

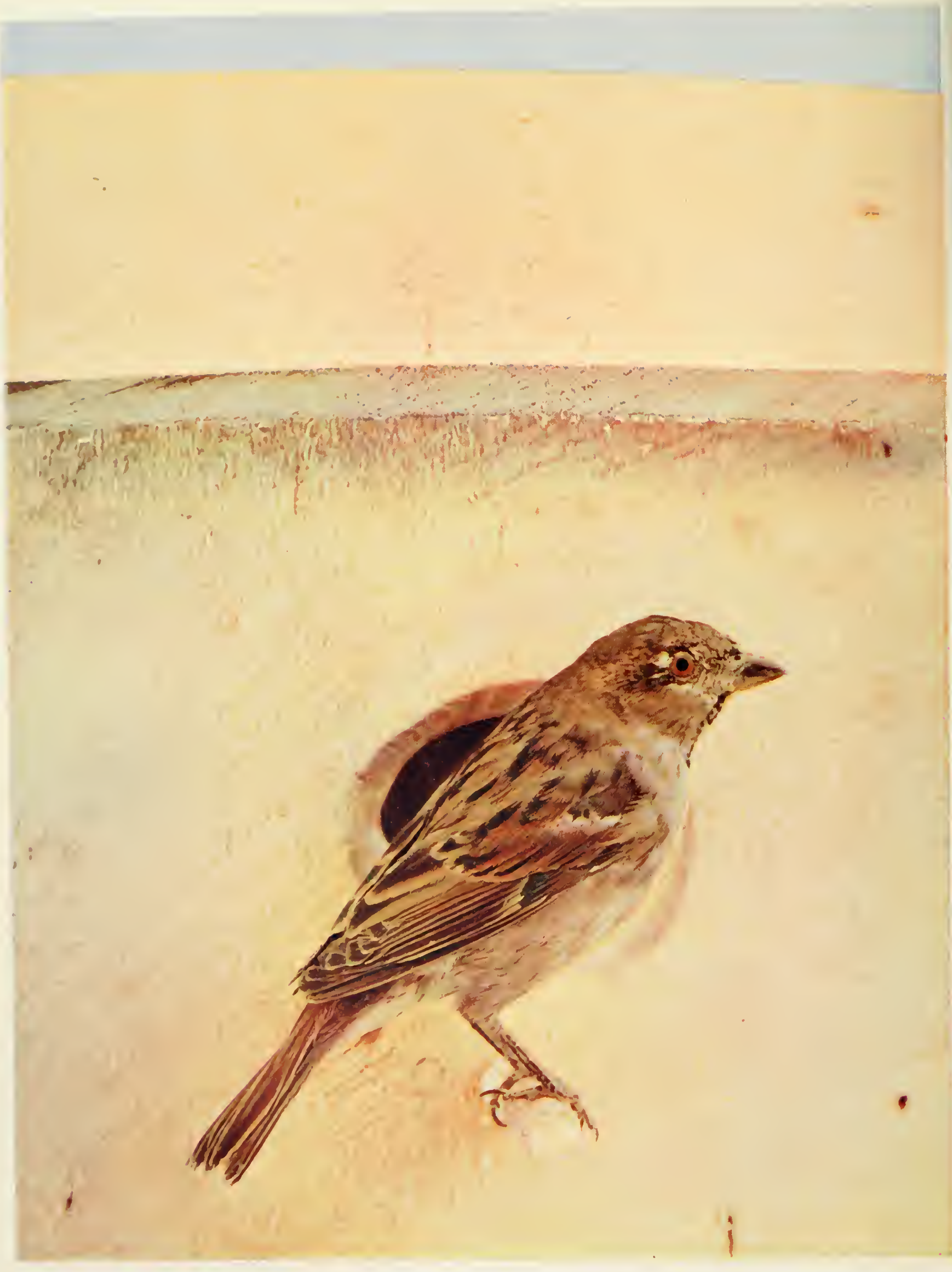
I'm afraid I do. I like to have my own way. Maybe you know something about that yourself, Bobbie. When I choose a particular tree or place for myself and family to live in, I am going to have it if I have to fight for it. I do chase the other birds away then, to be sure.

Oh, no, I don't always succeed. Once I remember a Robin got the better of me, so did a Catbird, and another time a Baltimore Oriole. When I can't whip a bird myself I generally give a call and a whole troop of Sparrows will come to my aid. My, how we do enjoy a fuss like that!

A bully? Well, yes, if by that you mean I rule around my own house, then I *am* a bully. My mate has to do just as I say, and the little Sparrows have to mind their papa, too.

"Don't hurt the little darlings, papa," says their mother, when it comes time for them to fly, and I hop about the nest, scolding them at the top of my voice. Then I scold her for daring to talk to me, and sometimes make her fly away while I teach the young ones a thing or two. Once in a while a little fellow among them will "talk back." I don't mind that though, if he is a Cock Sparrow and looks like his papa.

No, we do not sing. We leave that for the Song Sparrows. We talk a great deal, though. In the morning when we get up, and at night when we go to bed we chatter a great deal. Indeed there are people shabby enough to say that we are great nuisances about that time.



From col. Chi. Acad. Sciences.

ENGLISH SPARROW.
L fe-size.

Copyrighted by
Nature Study Pub. Co., 1897, Chicago.

THE ENGLISH SPARROW.

THE English Sparrow was first introduced into the United States at Brooklyn, New York, in the years 1851 and '52. The trees in our parks were at that time infested with a canker-worm, which wrought them great injury, and to rid the trees of these worms was the mission of the English Sparrow.

In his native country this bird, though of a seed-eating family (Finch), was a great insect eater. The few which were brought over performed, at first, the duty required of them; they devoured the worms and stayed near the cities. With the change of climate, however, came a change in their taste for insects. They made their home in the country as well as the cities, and became seed and vegetable eaters, devouring the young buds on vines and trees, grass-seed, oats, rye, and other grains.

Their services in insect-killing are still not to be despised. A single pair of these Sparrows, under observation an entire day, were seen to convey to their young no less than forty grubs an hour, an average exceeding three thousand in the course of a week. Moreover, even in the autumn he does not confine himself to grain, but feeds on various seeds, such as the dandelion, the sow-thistle, and the groundsel; all of which plants are classed as weeds. It has been known, also, to chase and devour the common white butterfly, whose caterpillars make havoc among the garden plants.

The good he may accomplish in this direction, however, is nullified to the lovers of the beautiful, by the war he constantly wages upon our song birds, destroying their young, and substituting his unattractive looks and inharmonious chirps for their beautiful plumage and soul-inspiring songs.

Mrs. Olive Thorne Miller in "Bird Ways" gives a fascinating picture of the wooing of a pair of Sparrows in a maple tree, within sight of her city window, their setting up house-keeping, domestic quarrel, separation, and the bringing home, immediately after, of a new bride by the Cock Sparrow.

She knows him to be a domestic tryant, a bully in fact, self-willed and violent, holding out, whatever the cause of disagreement, till he gets his own will; that the voices of the females are less harsh than the males', the chatter among themselves being quite soft, as is their "baby-talk" to the young brood.

That they delight in a mob we all know; whether a domestic skirmish or danger to a nest, how they will all congregate, chirping, pecking, scolding, and often fighting in a fierce yet amusing way! One cannot read these chapters of Mrs. Miller's without agreeing with Whittier:

> "Then, smiling to myself, I said,—
> How like are men and birds!"

Although a hardy bird, braving the snow and frost of winter, it likes a warm bed, to which it may retire after the toils of the day. To this end its resting place, as well as its nest, is always stuffed with downy feathers. Tramp, Hoodlum, Gamin, Rat of the Air! Notwithstanding these more or less deserved names, however, one cannot view a number of homeless Sparrows, presumably the last brood, seeking shelter in any corner or crevice from a winter's storm, without a feeling of deep compassion. The supports of a porch last winter made but a cold roosting place for three such wanderers within sight of our study window, and never did we behold them, 'mid a storm of sleet and rain, huddle down in their cold, ill-protected beds, without resolving another winter should see a home prepared for them.

ALLEN'S HUMMING BIRD.

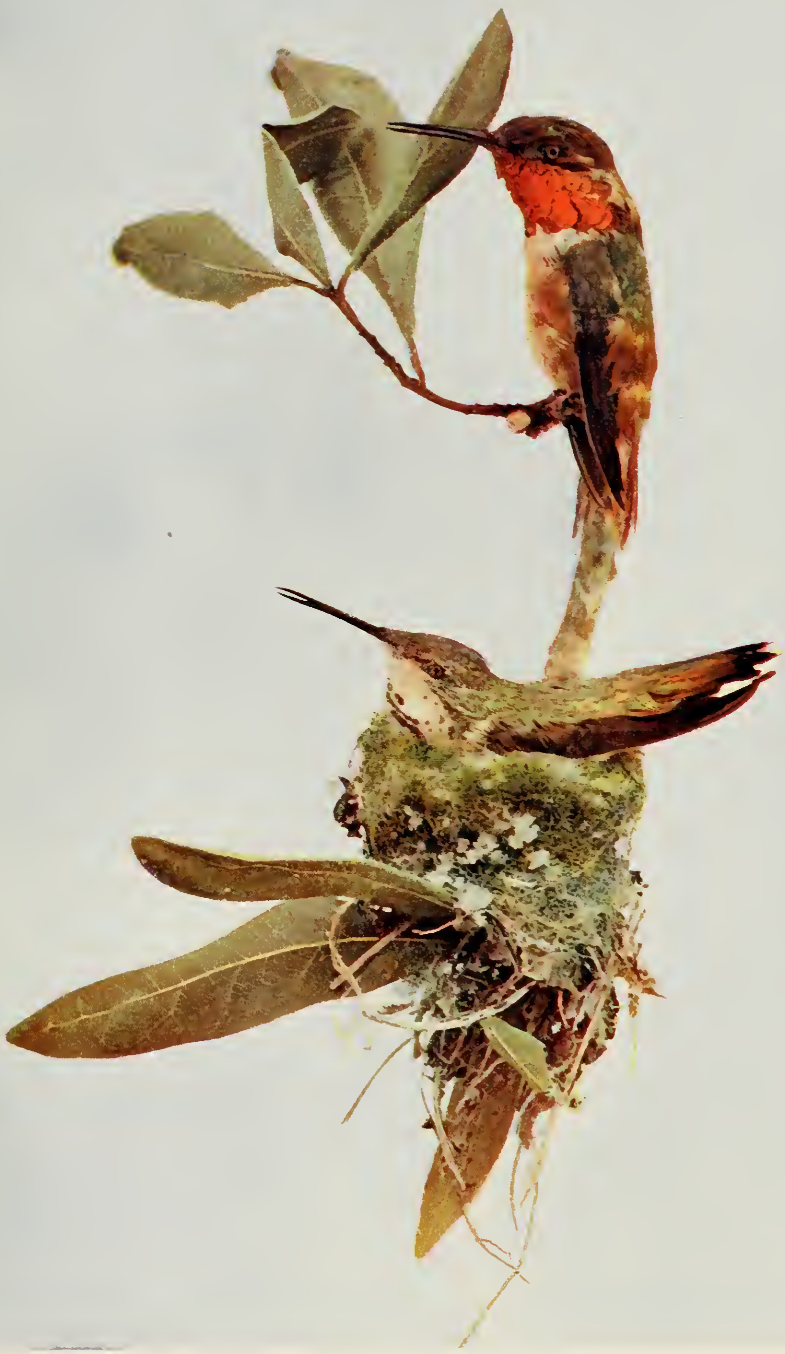
THE Humming birds, with their varied beauties, constitute the most remarkable feature of the bird-life of America. They have absolutely no representatives in any other part of the world, the Swifts being the nearest relatives they have in other countries. Mr. Forbes says that they abound most in mountainous countries, where the surface and productions of the soil are most diversified within small areas. They frequent both open and rare and inaccessible places, and are often found on the snowy peaks of Chimborazo as high as 16,000 feet, and in the very lowest valleys in the primeval forests of Brazil, the vast palm-covered districts of the deltas of the Amazon and Orinoco, the fertile flats and savannahs of Demarara, the luxurious and beautiful region of Xalapa, (the realm of perpetual sunshine), and other parts of Mexico. Many of the highest cones of extinct and existing volcanoes have also furnished great numbers of rare species.

These birds are found as small as a bumble bee and as large as a Sparrow. The smallest is from Jamaica, the largest from Patagonia.

Allen's Hummer is found on the Pacific coast, north to British Columbia, east to southern Arizona.

Mr. Langille, in "Our Birds in their Haunts," beautifully describes their flights and manner of feeding. He says "There are many birds the flight of which is so rapid that the strokes of their wings cannot be counted, but here is a species with such nerve of wing that its wing strokes cannot be seen. 'A hazy semi-circle of indistinctness on each side of the bird is all that is perceptible.' Poised in the air, his body nearly perpendicular, he seems to hang in front of the flowers which he probes so hurriedly, one after the other, with his long, slender bill. That long, tubular, fork-shaped tongue may be sucking up the nectar from those rather small cylindrical blossoms, or it may be capturing tiny insects housed away there. Much more like a large sphynx moth hovering and humming over the flowers in the dusky twilight, than like a bird, appears this delicate, fairy-like beauty. How the bright green of the body gleams and glistens in the sunlight. Each imperceptible stroke of those tiny wings conforms to the mechanical laws of flight in all their subtle complications with an ease and gracefulness that seems spiritual. Who can fail to note that fine adjustment of the organs of flight to aerial elasticity and gravitation, by which that astonishing bit of nervous energy can rise and fall almost on the perpendicular, dart from side to side, as if by magic, or, assuming the horizontal position, pass out of sight like a shooting star? Is it not impossible to conceive of all this being done by that rational calculation which enables the rower to row, or the sailor to sail his boat?"

"What heavenly tints in mingling radiance fly,
Each rapid movement gives a different dye;
Like scales of burnished gold they dazzling show,
Now sink to shade, now like a furnace glow."



rom col. F. M. Woodruff.

ALLENS HUMMING BIRD.
Life-size.

Copyrighted by
Nature Study Pub. Co., 1897, Chicago.

THE GREEN-WINGED TEAL.

Just a common Duck?

No, I'm not. There is only one other Duck handsomer than I am, and he is called the Wood Duck. You have heard something about him before. I am a much smaller Duck, but size doesn't count much, I find when it comes to getting on in the world—in *our* world, that is. I have seen a Sparrow worry a bird four times its size, and I expect you have seen a little boy do the same with a big boy many a time.

What is the reason I'm not a common Duck?

Well, in the first place, I don't waddle. I can walk just as gracefully as I can swim. Your barn-yard Duck can't do that. I can run, too, without getting all tangled up in the grass, and he can't do that, either. But sometimes I don't mind associating with the common Duck. If he lives in a nice big barn-yard, that has a good pond, and is fed with plenty of grain, I visit him quite often.

Where do I generally live?

Well, along the edges of shallow, grassy waters, where I feed upon grass, seeds, acorns, grapes, berries, as well as insects, worms, and small snails. I walk quite a distance from the water to get these things, too.

Can I fly?

Indeed I can, and very swiftly. You can see I am no common Duck when I can swim, and walk, and fly. *You* can't do the last, though you can the first two.

Good to eat?

Well, yes, they say when I feed on rice and wild oats I am perfectly delicious. Some birds were, you see, born to sing, and flit about in the trees, and look beautiful, while some were born to have their feathers taken off, and be roasted, and to look fine in a big dish on the table. The Teal Duck is one of those birds. You see we are useful as well as pretty. We don't mind it much if you eat us and say, "what a fine bird!" but when you call us "tough," that hurts our feelings.

Good for Christmas?

Oh, yes, or any other time—when you can catch us! We fly so fast that that it is not easy to do; and can dive under the water, too, when wounded.

Something about our nests?

Oh, they are built upon the ground, in a dry tuft of grass and weeds and lined with feathers. My mate often plucks the feathers from her own breast to line it. Sometimes she lays ten eggs, indeed once she laid sixteen.

Such a family of Ducklings as we had that year! You should have seen them swimming after their mother, and all crying, *Quack, quack, quack!* like babies as they were.

THE GREEN-WINGED TEAL.

A HANDSOME little Duck indeed is this, well known to sportsmen, and very abundant throughout North America. It is migratory in its habits, and nests from Minnesota and New Brunswick northward, returning southward in winter to Central America and Cuba.

The green wing is commonly found in small flocks along the edges of shallow, grassy waters, feeding largely upon seeds of grasses, small acorns, fallen grapes or berries, as well as aquatic insects, worms, and small snails. In their search for acorns these ducks are often found quite a distance from the water, in exposed situations feeding largely in the night, resting during the day upon bogs or small bare spots, closely surrounded and hidden by reeds and grasses.

On land this Duck moves with more ease and grace than any other of its species except the Wood Duck, and it can run with considerable speed. In the water also it moves with great ease and rapidity, and on the wing it is one of the swiftest of its tribe. From the water it rises with a single spring and so swiftly that it can be struck only by a very expert marksman; when wounded it dives readily.

As the Teal is more particular in the selection of its food than are most Ducks, its flesh, in consequence, is very delicious. Audubon says that when this bird has fed on wild oats at Green Bay, or soaked rice in the fields of Georgia or Carolina, it is much superior to the Canvas back in tenderness, juiciness, and flavor.

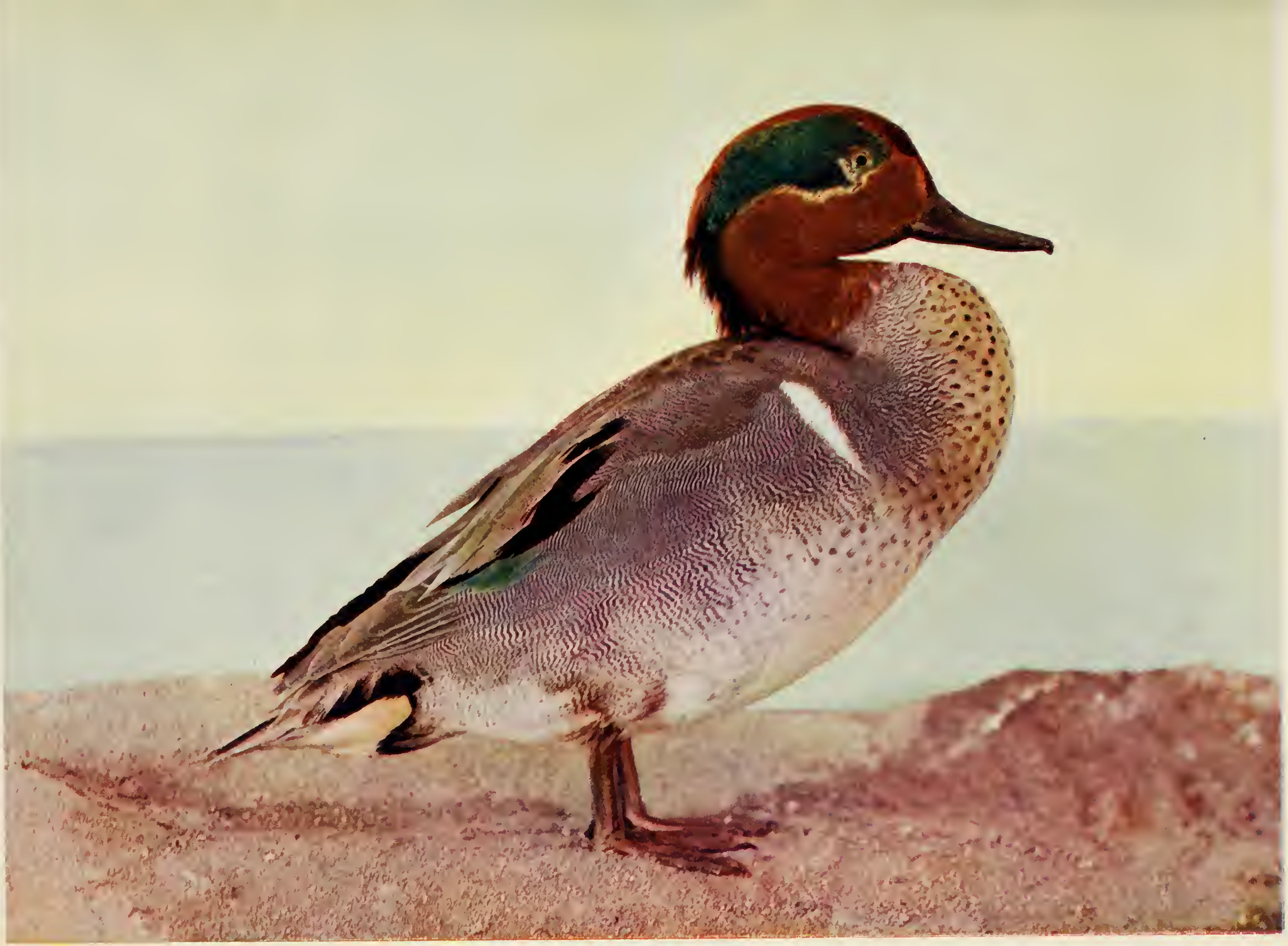
G. Arnold, in the *Nidologist*, says while traveling through the northwest he was surprised to see the number of Ducks and other wild fowl in close proximity to the railway tracks. He found a number of Teal nests within four feet of the rails of the Canadian Pacific in Manitoba. The warm, sun-exposed banks along the railway tracks, shrouded and covered with thick grass, afford a very fair protection for the nests and eggs from water and marauders of every kind. As the section men seldom disturbed them—not being collectors—the birds soon learned to trust them and would sit on their nests by the hour while the men worked within a few feet of them.

The green-winged Teal is essentially a fresh-water bird, rarely being met with near the sea. Its migrations are over the land and not along the sea shore. It has been seen to associate with the Ducks in a farmer's yard or pond and to come into the barnyard with tame fowls and share the corn thrown out for food.

The nests of the Teal are built upon the ground, generally in dry tufts of grass and often quite a distance from the water. They are made of grass, and weeds, etc., and lined with down. In Colorado under a sage brush, a nest was found which had been scooped in the sand and lined warmly with down evidently taken from the bird's own breast, which was plucked nearly bare. This nest contained ten eggs.

The number of eggs, of a pale buff color, is usually from eight to twelve, though frequently sixteen or eighteen have been found. It is far more prolific than any of the Ducks resorting to Hudson's Bay, and Mr. Hearn says he has seen the old ones swimming at the head of seventeen young when the latter were not much larger than walnuts.

In autumn the males usually keep in separate flocks from the females and young. Their notes are faint and piping and their wings make a loud whistling during flight.



From col. Chi. Acad. Sciences.

GREEN-WINGED TEAL.
$^4/_5$ Life-size.

Copyrighted by
Nature Study Pub. Co., 1897, Chicago.

THE BLACK GROUSE.

> Alone on English moor's I've seen the Black Cock stray,
> Sounding his earnest love-note on the air.
>
> —ANON.

WELL known as the Black Cock is supposed to be, we fancy few of our readers have ever seen a specimen. It is a native of the more southern countries of Europe, and still survives in many portions of the British Islands, especially those localities where the pine woods and heaths afford it shelter, and it is not driven away by the presence of human habitation.

The male bird is known to resort at the beginning of the nesting season to some open spot, where he utters his love calls, and displays his new dress to the greatest advantage, for the purpose of attracting as many females as may be willing to consort with him. His note when thus engaged is loud and resonant, and can be heard at a considerable distance. This crowing sound is accompanied by a harsh, grating, stridulous kind of cry which has been compared to the noise produced by whetting a scythe. The Black Cock does not pair, but leaves his numerous mates to the duties of maternity and follows his own desires while they prepare their nests, lay their eggs, hatch them, and bring up the young. The mother bird, however, is a fond, watchful parent, and when she has been alarmed by man or a prowling beast, has been known to remove her eggs to some other locality, where she thinks they will not be discovered.

The nest is carelessly made of grasses and stout herbage, on the ground, under the shelter of grass and bushes. There are from six to ten eggs of yellowish gray, with spots of light brown. The young are fed first upon insects, and afterwards on berries, grain, and the buds and shoots of trees.

The Black Grouse is a wild and wary creature. The old male which has survived a season or two is particularly shy and crafty, distrusting both man and dog, and running away as soon as he is made aware of approaching danger.

In the autumn the young males separate themselves from the other sex and form a number of little bachelor establishments of their own, living together in harmony until the next nesting season, when they all begin to fall in love; "the apple of discord is thrown among them by the charms of the hitherto repudiated sex, and their rivalries lead them into determined and continual battles, which do not cease until the end of the season restores them to peace and sobriety."

The coloring of the female is quite different from that of the male Grouse. Her general color is brown, with a tinge of orange, barred with black and speckled with the same hue, the spots and bars being larger on the breast, back, and wings, and the feathers on the breast more or less edged with white. The total length of the adult male is about twenty-two inches, and that of the female from seventeen to eighteen inches. She also weighs nearly one-third less than her mate, and is popularly termed the Heath Hen.

THE AMERICAN FLAMINGO.

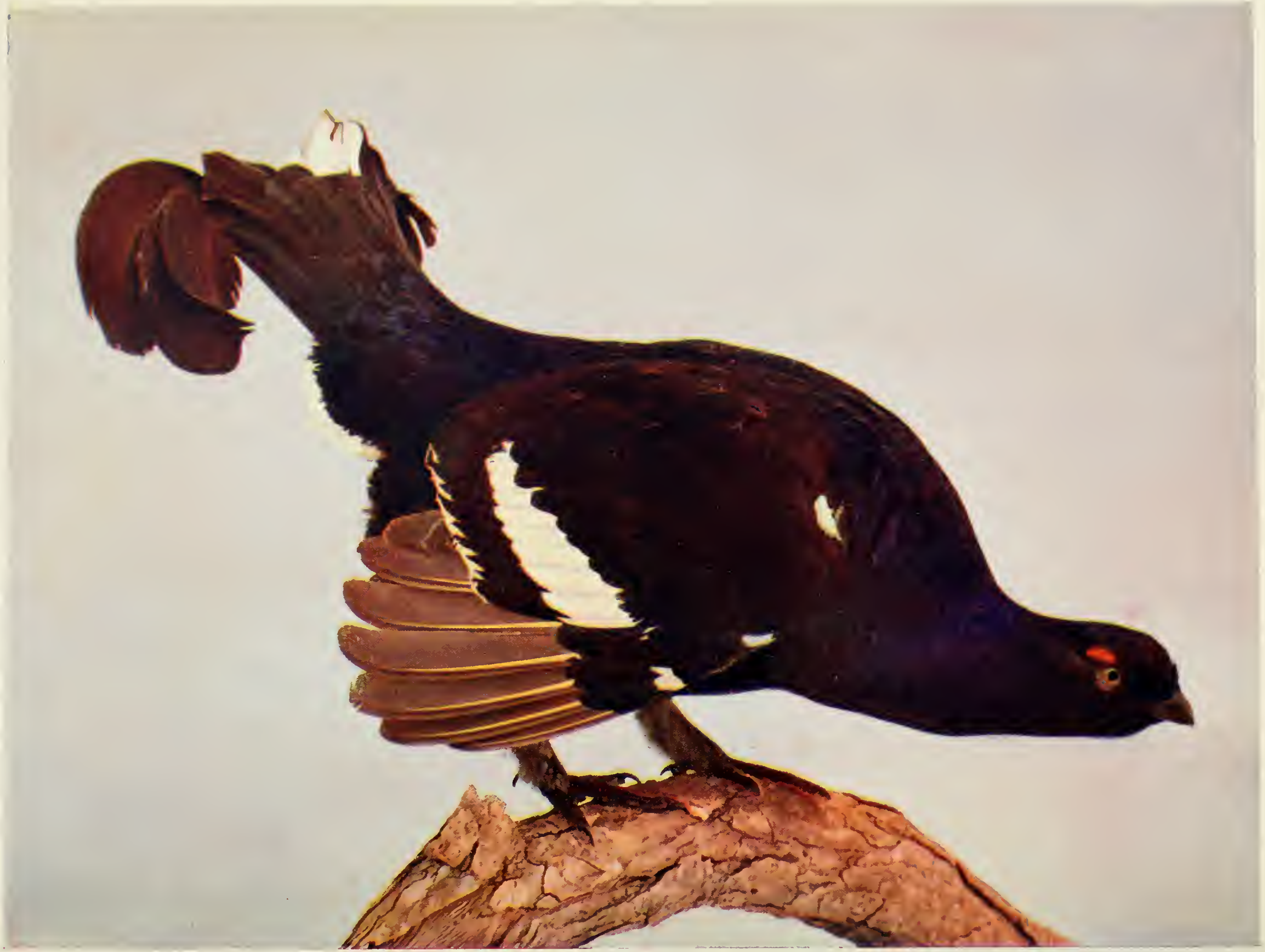
IN this interesting family of birds are included seven species, distributed throughout the tropics. Five species are American, of which one reaches our southern border in Florida. Chapman says that they are gregarious at all seasons, are rarely found far from the seacoasts, and their favorite resorts are shallow bays or vast mud flats which are flooded at high water. In feeding the bill is pressed downward into the mud, its peculiar shape making the point turn upward. The ridges along its sides serve as strainers through which are forced the sand and mud taken in with the food.

The Flamingo is resident in the United States only in the vicinity of Cape Sable, Florida, where flocks of sometimes a thousand of these rosy vermillion creatures are seen. A wonderful sight indeed. Mr. D. P. Ingraham spent more or less of his time for four seasons in the West Indies among them. He states that the birds inhabit the shallow lagoons and bays having soft clayey bottoms. On the border of these the nest is made by working the clay up into a mound which, in the first season is perhaps not more than a foot high and about eight inches in diameter at the top and fifteen inches at the base. If the birds are unmolested they will return to the same nesting place from year to year, each season augmenting the nest by the addition of mud at the top, leaving a slight depression for the eggs. He speaks of visiting the nesting grounds where the birds had nested the previous year and their mound-like nests were still standing. The birds nest in June. The number of eggs is usually two, sometimes only one and rarely three. When three are found in a nest it is generally believed that the third has been laid by another female.

The stature of this remarkable bird is nearly five feet, and it weighs in the flesh six or eight pounds. On the nest the birds sit with their long legs doubled under them. The old story of the Flamingo bestriding its nest in an ungainly attitude while sitting is an absurd fiction.

The eggs are elongate-ovate in shape, with a thick shell, roughened with a white flakey substance, but bluish when this is scraped off. It requires thirty-two days for the eggs to hatch.

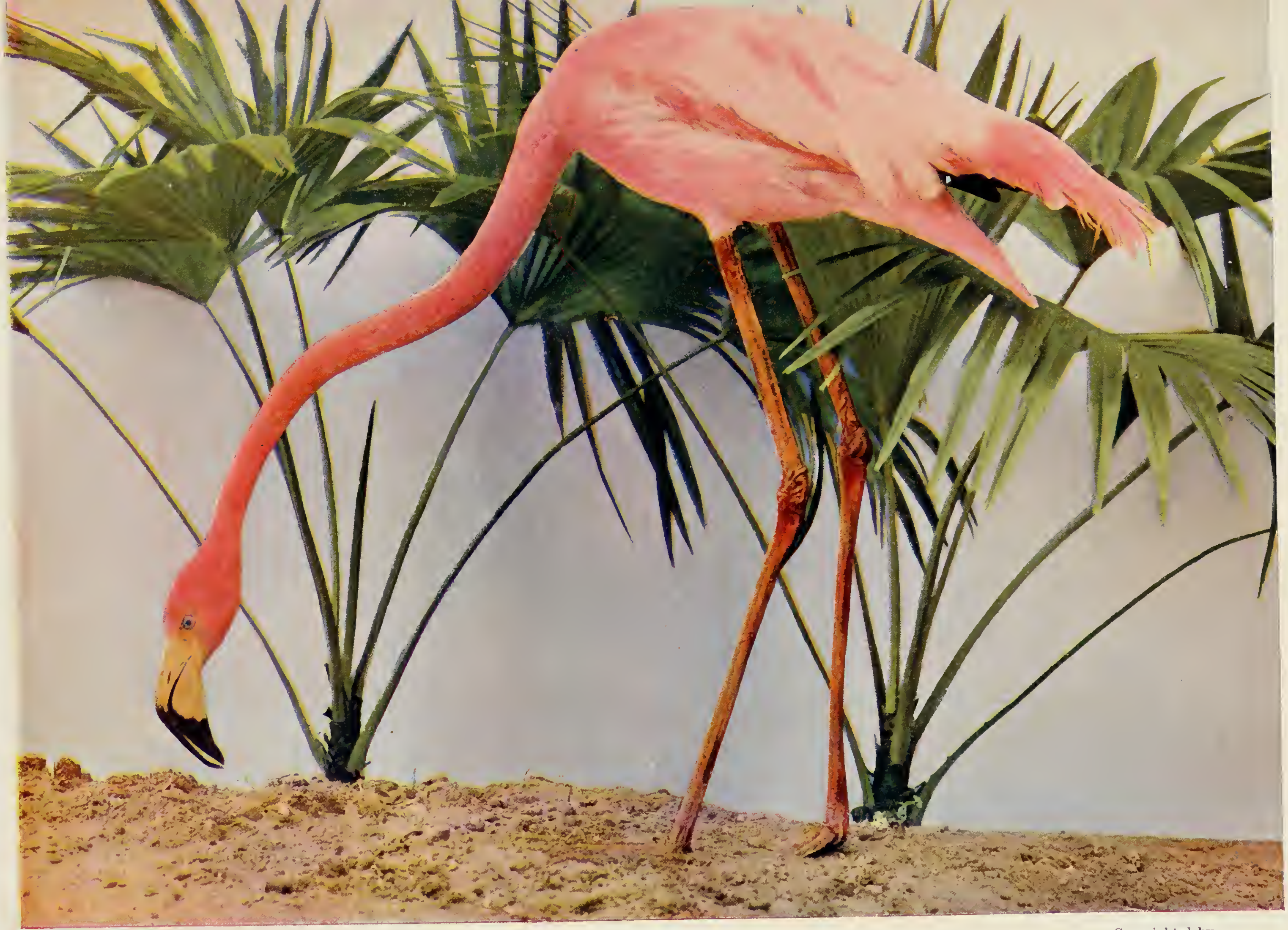
The very fine specimen we present in BIRDS represents the Flamingo feeding, the upper surface of the unique bill, which is abruptly bent in the middle, facing the ground.



From col. C. E. Petford.

BLACK GROUSE.

Copyrighted by
Nature Study Pub. Co., 1897, Chicago.



From col. Chi. Acad. Sciences.

FLAMINGO.
⅙ Life-size.

Copyrighted by
Nature Study Pub. Co., 1897, Chicago.

THE BIRDS OF BETHLEHEM.

I.

I heard the bells of Bethlehem ring—
Their voice was sweeter than the priests';
I heard the birds of Bethlehem sing
Unbidden in the churchly feasts.

II.

They clung and swung on the swinging chain
High in the dim and incensed air:
The priest, with repetitions vain,
Chanted a never ending prayer.

III.

So bell and bird and priest I heard,
But voice of bird was most to me—
It had no ritual, no word,
And yet it sounded true and free.

IV.

I thought child Jesus, were he there,
Would like the singing birds the best,
And clutch his little hands in air
And smile upon his mother's breast.

R. W. GILDER, in *The Century*.

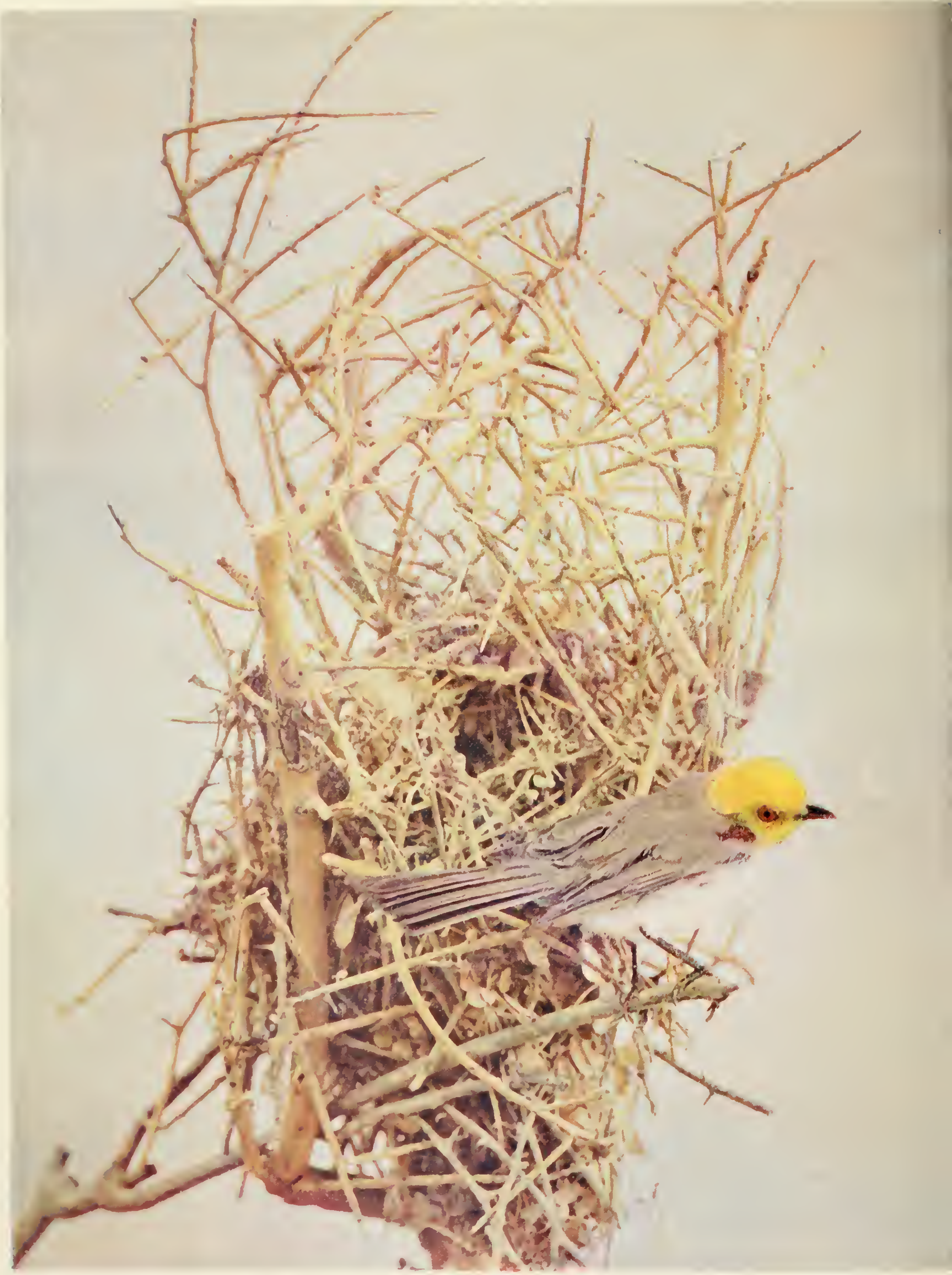
THE BIRD'S STORY.

"I once lived in a little house,
And lived there very well;
I thought the world was small and round,
And made of pale blue shell.

I lived next in a little nest,
Nor needed any other;
I thought the world was made of straw,
And brooded by my mother.

One day I fluttered from the nest
To see what I could find.
I said: 'The world is made of leaves,
I have been very blind.'

At length I flew beyond the tree,
Quite fit for grown-up labors;
I don't know how the world *is* made,
And neither do my neighbors."



From col. F. M Woodruff.

VERDIN.
$\frac{4}{5}$ Life-size.

Copyrighted by
Nature Study Pub. Co., 1897, Chicag

THE VERDIN.

A DAINTY little creature indeed is the Yellow-headed Bush Tit, or Verdin, being smaller than the largest North American Humming Bird, which inhabits southern Arizona and southward. It is a common bird in suitable localities throughout the arid regions of Northern Mexico, the southern portions of Texas, Arizona, New Mexico, and in Lower California. In spite of its diminutive size it builds a remarkable structure for a nest—large and bulky, and a marvel of bird architecture. Davie says it is comparatively easy to find, being built near the ends of the branches of some low, thorny tree or shrub, and in the numerous varieties of cacti and thorny bushes which grow in the regions of its home.

The nest is globular, flask-shaped or retort shape in form, the outside being one mass of thorny twigs and stems interwoven, while the middle is composed of flower-stems and the lining is of feathers. The entrance is a small circular opening. Mr. Atwater says that the birds occupy the nests during the winter months. They are generally found nesting in the high, dry parts of the country, away from tall timber, where the thorns are the thickest. From three to six eggs are laid, of a bluish or greenish-white or pale blue, speckled, chiefly round the larger end, with reddish brown.

"The woods were made for the hunters of dreams,
  The brooks for the fishers of song.
To the hunters who hunt for the gunless game
  The woods and the streams belong.
There are thoughts that moan from the soul of the pine,
  And thoughts in the flower-bell curled,
And the thoughts that are blown from the scent of the fern
  Are as new and as old as the world."

THE BRONZED GRACKLE.

You can call me the Crow Blackbird, little folks, if you want to. People generally call me by that name.

I look something like the Crow in the March number of BIRDS, don't I? My dress is handsomer than his, though. Indeed I am said to be a splendid looking bird, my bronze coat showing very finely in the trees.

The Crow said *Caw, Caw, Caw!* to the little boys and girls. That was his way of talking. My voice is not so harsh as his. I have a note which some people think is quite sweet; then my throat gets rusty and I have some trouble in finishing my tune. I puff out my feathers, spread my wings and tail, then lifting myself on the perch force out the other notes of my song. Maybe you have seen a singer on the stage, instead of a perch, do the same thing. Had to get on his tip-toes to reach a high note, you know.

Like the Crow I visit the cornfields, too. In the spring when the man with the plow turns over the rich earth, I follow after and pick up all the grubs and insects I can find. They would destroy the young corn if I didn't eat them. Then, when the corn grows up, I, my sisters, and my cousins, and my aunts drop down into the field in great numbers. Such a picnic as we do have! The farmers don't seem to like it, but certainly they ought to pay us for our work in the spring, don't you think? Then I think worms as a steady diet are not good for anybody, not even a Crow, do you?

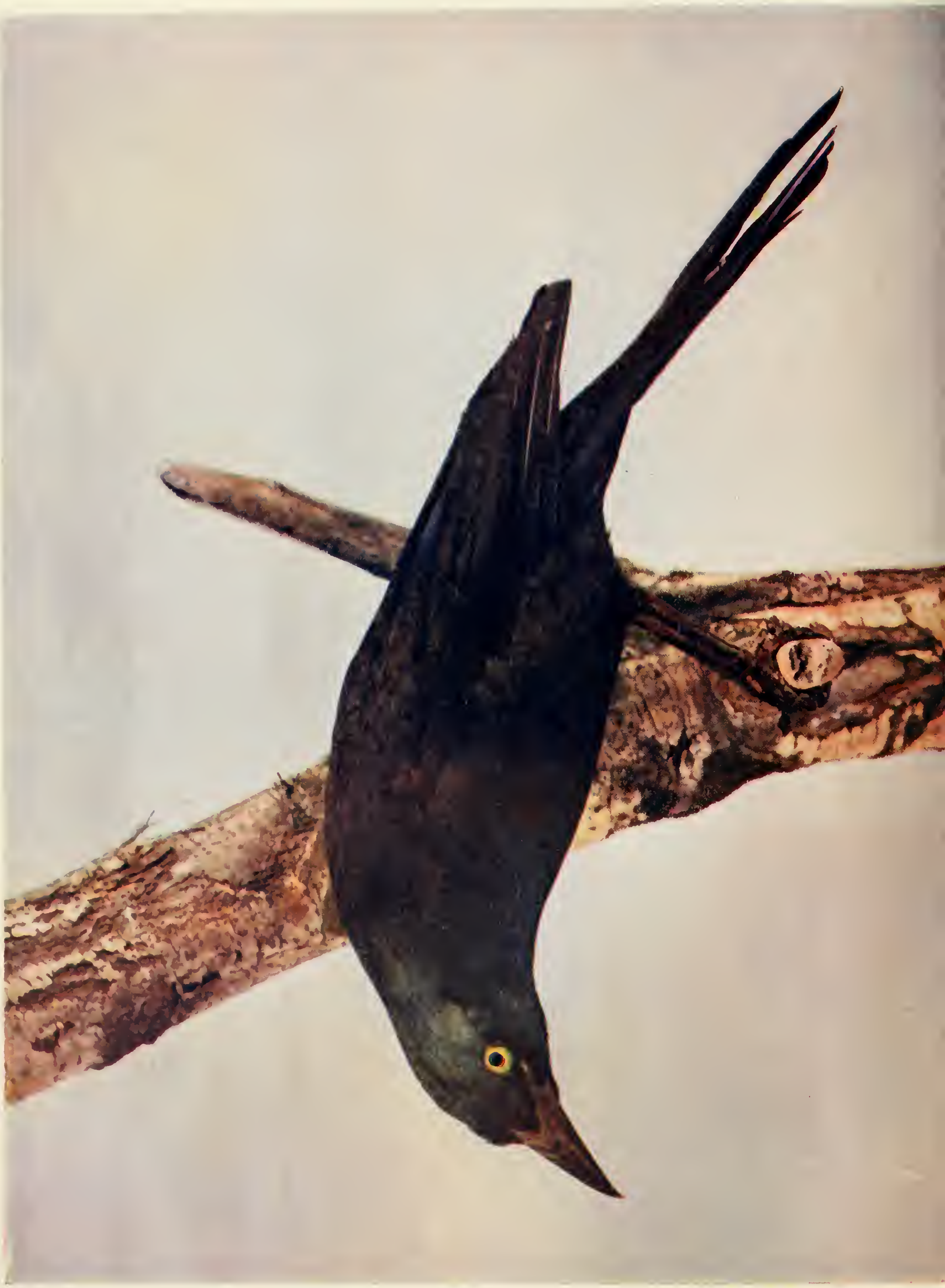
We like nuts, too, and little crayfish which we find on the edges of ponds. No little boy among you can beat us in going a-nutting.

We Grackles are a very sociable family, and like to visit about among our neighbors. Then we hold meetings and all of us try to talk at once. People say we are very noisy at such times, and complain a good deal. They ought to think of their own meetings. They do a great deal of talking at such times, too, and sometimes break up in a fight.

How do I know? Well, a little bird told me so.

Yes, we build our nest as other birds do; ours is not a dainty affair; any sort of trash mixed with mud will do for the outside. The inside we line with fine dry grass. My mate does most of the work, while I do the talking. That is to let the Robin and other birds know I am at home, and they better not come around.

Yours,
MR. BRONZED GRACKLE.



THE BRONZED GRACKLE.

> First come the Blackbirds clatt'rin in tall trees,
> And settlin' things in windy congresses,
> Queer politicians though, for I'll be skinned
> If all on 'em don't head against the wind.
>
> —LOWELL.

BY the more familiar name of Crow Blackbird this fine but unpopular bird is known, unpopular among the farmers for his depredations in their cornfields, though the good he does in ridding the soil, even at the harvest season, of noxious insects and grubs should be set down to his credit.

The Bronzed Grackle or Western Crow Blackbird, is a common species everywhere in its range, from the Alleghanies and New England north to Hudson Bay, and west to the Rocky Mountains. It begins nesting in favorable seasons as early as the middle of March, and by the latter part of April many of the nests are finished. It nests anywhere in trees or bushes or boughs, or in hollow limbs or stumps at any height A clump of evergreen trees in a lonely spot is a favorite site, in sycamore groves along streams, and in oak woodlands. It is by no means unusual to see in the same tree several nests, some saddled on horizontal branches, others built in large forks, and others again in holes, either natural or those made by the Flicker. A long list of nesting sites might be given, including Martin-houses, the sides of Fish Hawk's nests, and in church spires, where the Blackbirds' "clatterin'" is drowned by the tolling bell.

The nest is a coarse, bulky affair, composed of grasses, knotty roots mixed with mud, and lined with fine dry grass, horse hair, or sheep's wool. The eggs are light greenish or smoky blue, with irregular lines, dots and blotches distributed over the surface. The eggs average four to six, though nests have been found containing seven.

The Bronze Grackle is a bird of many accomplishments. He does not hop like the ordinary bird, but imitates the Crow in his stately walk, says one who has watched him with interest. He can pick beech nuts, catch cray fish without getting nipped, and fish for minnows alongside of any ten-year-old. While he is flying straight ahead you do not notice anything unusual, but as soon as he turns or wants to alight you see his tail change from the horizontal to the vertical—into a rudder. Hence he is called keel-tailed.

The Grackle is as omnivorous as the Crow or Blue Jay, without their sense of humor, and whenever opportunity offers will attack and eat smaller birds, especially the defenseless young. His own meet with the like fate, a fox squirrel having been seen to emerge from a hole in a large dead tree with a young Blackbird in its mouth. The Squirrel was attacked by a number of Blackbirds, who were greatly excited, but it paid no attention to their demonstrations and scampered off into the wood with his prey. Of their quarrels with Robins and other birds much might be written. Those who wish to investigate their remarkable habits will do well to read the acute and elaborate observations of Mr. Lyndes Jones, in a recent Bulletin of Oberlin College. He has studied for several seasons the remarkable Bronze Grackle roost on the college campus at that place, where thousands of these birds congregate from year to year, and, though more or less offensive to some of the inhabitants, add considerably to the attractiveness of the university town.

THE RING-NECKED PHEASANT.

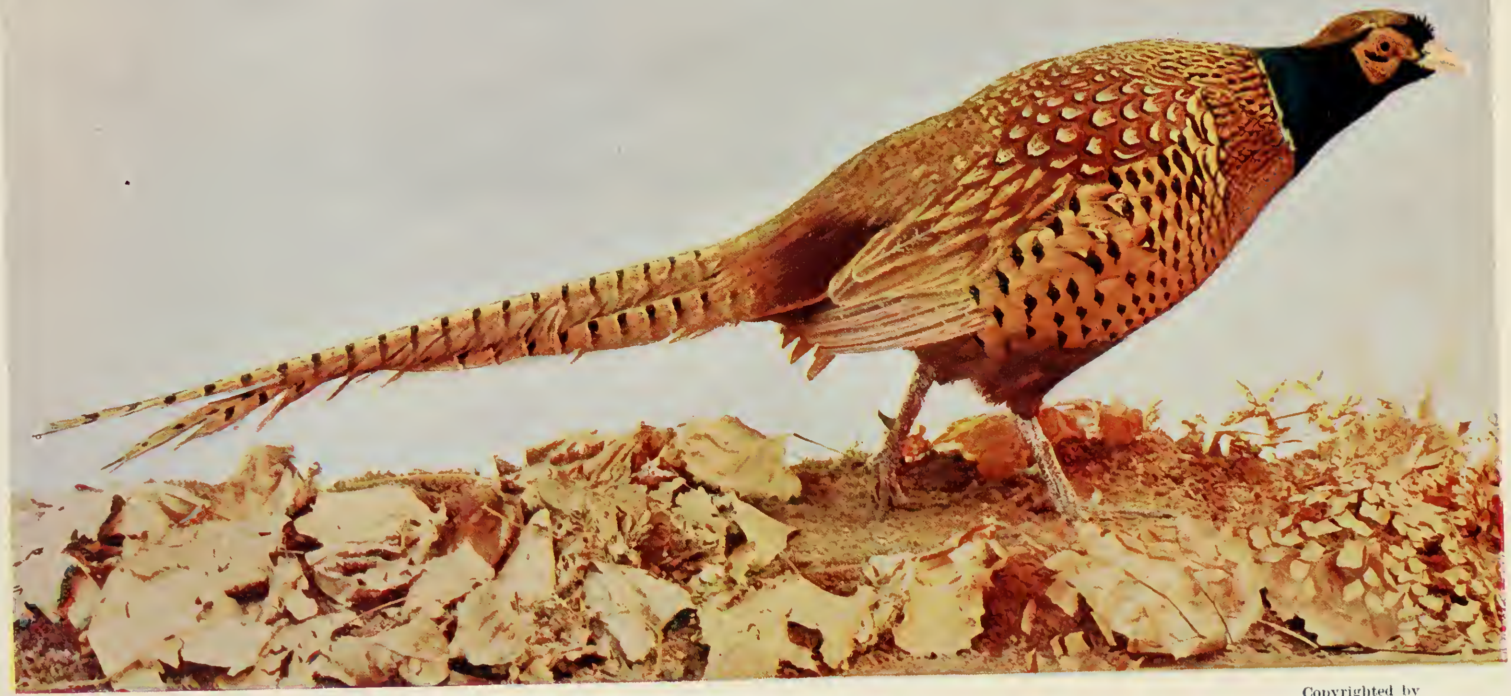
WE are fortunate in being able to present our readers with a genuine specimen of the Ring-Necked species of this remarkable family of birds, as the Ring-Neck has been crossed with the Mongolian to such an extent, especially in many parts of the United States, that they are practically the same bird now. They are gradually taking the place of Prairie Chickens, which are becoming extinct. The hen will hatch but once each year, and then in the late spring. She will hatch a covey of from eighteen to twenty-two young birds from each setting. The bird likes a more open country than the quail, and nests only in the open fields, although it will spend much time roaming through timberland. Their disposition is much like that of the quail, and at the first sign of danger they will rush into hiding. They are handy and swift flyers and runners. In the western states they will take the place of the Prairie Chicken, and in Ohio will succeed the Quail and common Pheasant.

While they are hardy birds, it is said that the raising of Mongolian-English Ring-Necked Pheasants is no easy task. The hens do not make regular nests, but lay their eggs on the ground of the coops, where they are picked up and placed in a patent box, which turns the eggs over daily. After the breeding season the male birds are turned into large parks until February.

The experiment which is now being made in Ohio—if it can be properly so termed, thousands of birds having been liberated and begun to increase—has excited wide-spread interest. A few years ago the Ohio Fish and Game Commission, after hearing of the great success of Judge Denny, of Portland, Oregon, in rearing these birds in that state, decided it would be time and money well spent if they should devote their attention and an "appropriation" to breeding and rearing these attractive game birds. And the citizens of that state are taking proper measures to see that they are protected. Recently more than two thousand Pheasants were shipped to various counties of the state, where the natural conditions are favorable, and where the commission has the assurance that the public will organize for the purpose of protecting the Pheasants. A law has been enacted forbidding the killing of the birds until November 15, 1900. Two hundred pairs liberated last year increased to over two thousand. When not molested the increase is rapid. If the same degree of success is met with between now and 1900, with the strict enforcement of the game laws, Ohio will be well stocked with Pheasants in a few years. They will prove a great benefit to the farmers, and will more than recompense them for the little grain they may take from the fields in destroying bugs and insects that are now agents of destruction to the growing crops.

The first birds were secured by Mr. E. H. Shorb, of Van Wert, Ohio, from Mr. Verner De Guise, of Rahway, N. J. A pair of Mongolian Pheasants, and a pair of English Ring-Necks were secured from the Wyandache Club, Smithtown, L. I. These birds were crossed, thus producing the English Ring - Neck Mongolian Pheasants, which are larger and better birds, and by introducing the old English Ring-Neck blood, a bird was produced that does not wander, as the thoroughbred Mongolian Pheasant does.

Such of our readers as appreciate the beauty and quality of this superb specimen will no doubt wish to have it framed for the embellishment of the dining room.



From col. Chi. Acad Sciences.

RING-NECKED PHEASANT.
1/5 Life-size.

Copyrighted by
Nature Study Pub. Co., 1897, Chicago.

BIRD MISCELLANY.

Knowledge never learned of schools
Of the wild bee's morning chase,
Of the wild-flowers' time and place,
Flight of fowl and habitude
Of the tenants of the wood ;
How the tortoise bears his shell ;
How the woodchuck digs his cell
And the ground-mole makes his well ;
How the robin feeds her young ;
How the oriole's nest is hung.

—WHITTIER.

Consider the marvellous life of a bird and the manner of its whole existence. . . . Consider the powers of that little mind of which the inner light flashes from the round bright eye ; the skill in building its home, in finding its food, in protecting its mate, in serving its offspring, in preserving its own existence, surrounded as it is on all sides by the most rapacious enemies. . . .

When left alone it is such a lovely little life—cradled among the hawthorn buds, searching for aphidæ amongst apple blossoms, drinking dew from the cup of a lily ; awake when the gray light breaks in the east, throned on the topmost branch of a tree, swinging with it in the sunshine, flying from it through the air ; then the friendly quarrel with a neighbor over a worm or berry ; the joy of bearing grass-seed to his mate where she sits low down amongst the docks and daisies ; the triumph of singing the praise of sunshine or of moonlight ; the merry, busy, useful days ; the peaceful sleep, steeped in the scent of the closed flower, with head under one wing and the leaves forming a green roof above.

—OUIDA.

THE YELLOW-BREASTED CHAT.

I am often heard, but seldom seen. If I were a little boy or a little girl, grown people would me I tell should be seen and not heard. That's the difference between you and a bird like me, you see.

It would repay you to make my acquaintance. I am such a jolly bird. Sometimes I get all the dogs in my neighborhood howling by whistling just like their masters. Another time I mew like a cat, then again I give some soft sweet notes different from those of any bird you ever heard.

In the spring, when my mate and I begin housekeeping, I do some very funny things, like the clown in a circus. I feel so happy that I go up a tree branch by branch, by short flights and jumps, till I get to the very top. Then I launch myself in the air, as a boy dives when he goes swimming, and you would laugh to see me flirting my tail, and dangling my legs, coming down into the thicket by odd jerks and motions.

It really is so funny that I burst out laughing myself, saying, *chatter-chatter*, *chat-chat-chat-chat!* I change my tune sometimes, and it sounds like *who who*, and *tea-boy*.

You must be cautious though, if you want to see me go through my performance. Even when I am doing those funny things in the air I have an eye out for my enemies. Should I see you I would hide myself in the bushes and as long as you were in sight I would be angry and say *chut*, *chut!* as cross as could be.

Have I any other name ?

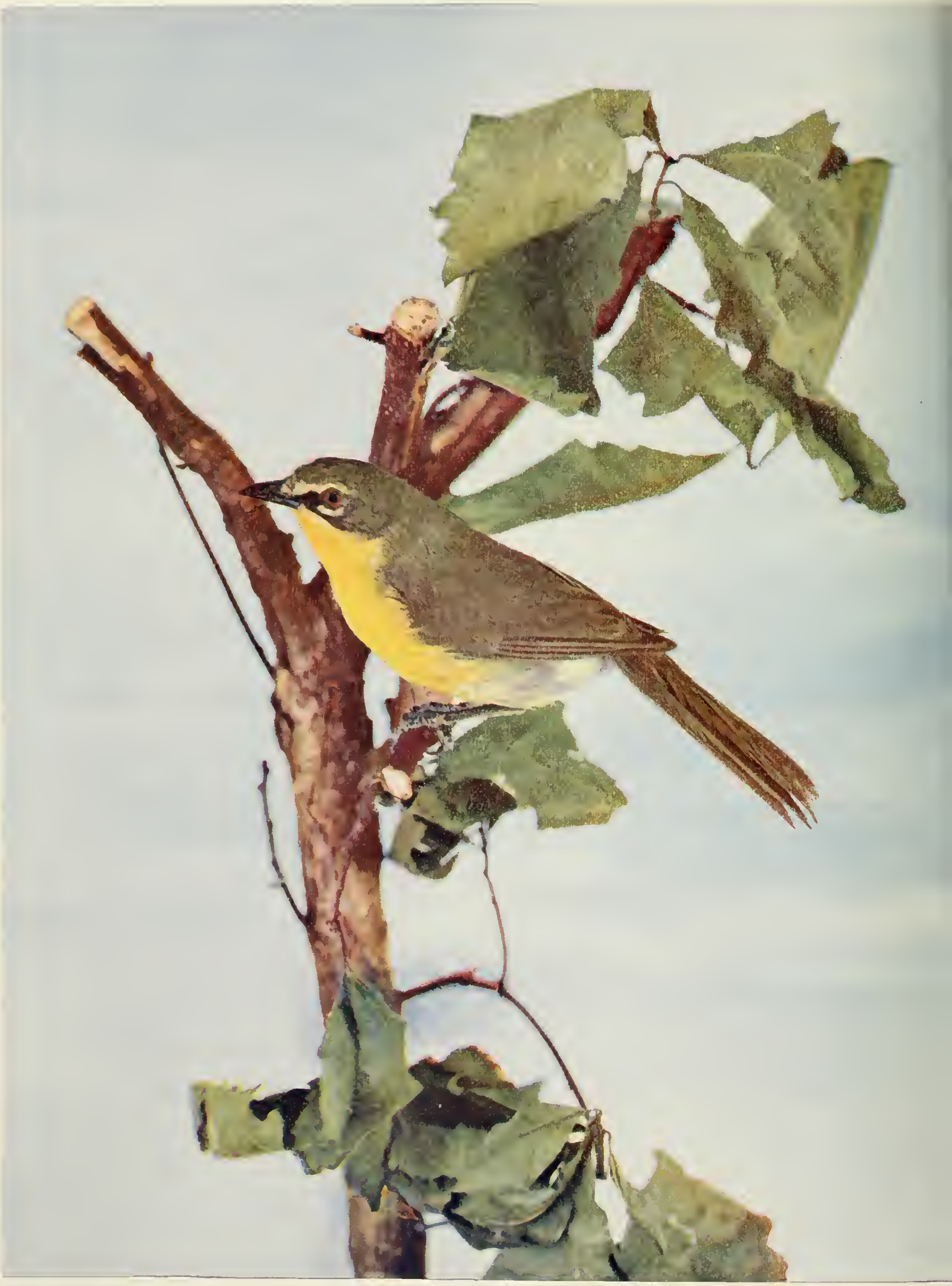
Yes, I am called the Yellow Mockingbird. But that name belongs to another. His picture was in the June number of Birds, so you know something about him. They say I imitate other birds as he does. But I do more than that. I can throw my voice in one place, while I am in another.

It is a great trick, and I get lots of sport out of it.

Do you know what that trick is called ? If not ask your papa. It is such a long word I am afraid to use it.

About my nest ?

Oh, yes, I am coming to that. I arrive in this country about May 1, and leave for the south in the winter. My nest is nothing to boast of ; rather big, made of leaves, bark, and dead twigs, and lined with fine grasses and fibrous roots. My mate lays eggs, white in color, and our little ones are, like their papa, very handsome.



From col. F. M. Woodruff.

CHICAGO COLORTYPE CO.

YELLOW-BREASTED CHAT
⅓ Life-size.

Copyrighted by
Nature Study Pub. Co., 1897, Chicago.

THE YELLOW-BREASTED CHAT.

A COMMON name for this bird, the largest of the warblers, is the Yellow Mockingbird. It is found in the eastern United States, north to the Connecticut Valley and Great Lakes; west to the border of the Great Plains; and in winter in eastern Mexico and Guatemala. It frequents the borders of thickets, briar patches, or wherever there is a low, dense growth of bushes—the thornier and more impenetrable the better.

"After an acquaintance of many years," says Frank M. Chapman, "I frankly confess that the character of the Yellow-Crested Chat is a mystery to me. While listening to his strange medley and watching his peculiar actions, we are certainly justified in calling him eccentric, but that there is a method in his madness no one who studies him can doubt."

By many observers this bird is dubbed clown or harlequin, so peculiar are his antics or somersaults in the air; and by others "mischief maker," because of his ventriloquistic and imitating powers, and the variety of his notes. In the latter direction he is surpassed only by the Mockingbird.

The mewing of a cat, the barking of a dog, and the whistling sound produced by a Duck's wings when flying, though much louder, are common imitations with him. The last can be perfectly imitated by a good whistler, bringing the bird instantly to the spot, where he will dodge in and out among the bushes, uttering, if the whistling be repeated, a deep toned emphatic *tac*, or hollow, resonant *meow*.

In the mating season he is the noisiest bird in the woods. At this time he may be observed in his wonderful aerial evolutions, dangling his legs and flirting his tail, singing vociferously the while—a sweet song different from all his jests and jeers—and descending by odd jerks to the thicket. After a few weeks he abandons these clown-like maneuvers and becomes a shy, suspicious haunter of the depths of the thicket, contenting himself in taunting, teasing, and misleading, by his variety of calls, any bird, beast, or human creature within hearing.

All these notes are uttered with vehemence, and with such strange and various modulations as to appear near or distant, in the manner of a ventriloquist. In mild weather, during moonlight nights, his notes are heard regularly, as though the performer were disputing with the echoes of his own voice.

"Perhaps I ought to be ashamed to confess it," says Mr. Bradford Torrey, after a visit to the Senate and House of Representatives at Washington, "but after all, the congressman in feathers interested me most. I thought indeed, that the *Chat* might well enough have been elected to the lower house. His volubility and waggish manners would have made him quite at home in that assembly, while his orange colored waistcoat would have given him an agreeable conspicuity. But, to be sure, he would have needed to learn the use of tobacco."

The nest of the Chat is built in a thicket, usually in a thorny bush or thick vine five feet above the ground. It is bulky, composed exteriorly of dry leaves, strips of loose grape vine bark, and similar materials, and lined with fine grasses and fibrous roots. The eggs are three to five in number, glossy white, thickly spotted with various shades of rich, reddish brown and lilac; some specimens however have a greenish tinge, and others a pale pink.

SUMMARY.

Page 203.

MOUNTAIN BLUEBIRD.—*Sialia arctica.* Other names: "Rocky Mountain" and "Arctic Bluebird."

Range—Rocky Mountain region, north to Great Slave Lake, south to Mexico, west to the higher mountain ranges along the Pacific.

Nest—Placed in deserted Woodpecker holes, natural cavities of trees, nooks and corners of barns and outhouses; composed of dry grass.

Eggs—Commonly five, of pale, plain greenish blue.

Page 208.

ENGLISH SPARROW.—*Passer domesticus.* Other names: "European Sparrow," "House Sparrow."

Range—Southern Europe. Introduced into and naturalized in North America, Australia, and other countries.

Nest—Of straw and refuse generally, in holes, boxes, trees, any place that will afford protection.

Eggs—Five to seven.

Page 211.

ALLEN'S HUMMING BIRD.—*Selasphorus alleni.*

Range—Pacific coast, north to British Columbia, east to southern Arizona.

Nest—Plant down, covered with lichens.

Eggs—Two, white.

Page 215.

GREEN-WINGED TEAL.—*Anas carolinensis.*

Range—North America, migrating south to Honduras and Cuba.

Nest—On the ground, in a thick growth of grass.

Eggs—Five to eight, greenish-buff, usually oval.

Page 220.

BLACK GROUSE.—*Tetrao tetrix.* Other name: "Black Cock."

Range—Southern Europe and the British Islands.

Nest—Carelessly made, of grasses and stout herbage, on the ground.

Eggs—Six to ten, of yellowish gray, with spots of light brown.

Page 221.

AMERICAN FLAMINGO.—*Phœnicopterus ruber.*

Range.—Atlantic coasts of sub-tropical and tropical America; Florida Keys.

Nest—Mass of earth, sticks, and other material scooped up to the height of several feet and hollow at the top.

Eggs.—One or two, elongate-ovate in shape, with thick shell, roughened with a white flakey substance, but bluish when this is scraped off.

Page 226.

VERDIN.—*Auriparus flaviceps.* Other name: "Yellow-headed Bush Tit."

Range—Northern regions of Mexico and contiguous portions of the United States, from southern Texas to Arizona and Lower California.

Nest—Globular, the outside being one mass of thorny twigs and stems interwoven, and lined with feathers.

Eggs—Three to six, of a bluish or greenish white color, speckled with reddish brown.

Page 230.

BRONZED GRACKLE.—*Quiscalus quiscula æneus.*

Range—Eastern North America from the Alleghanies and New England north to Hudson Bay, west to the Rocky Mountains.

Nest—In sycamore trees and oak woodlands a coarse bulky structure of grasses, knotty roots, mixed with mud, lined with horse hair or wool.

Eggs—Four to six, of a light greenish or smoky-blue, with lines, dots, blotches and scrawls on the surface.

Page 233.

RING-NECKED PHEASANT.—*Phasianus torquatus.*

Range—Throughout China; have been introduced into England and the United States.

Nest—On the ground under bushes.

Eggs—Vary, from thirteen to twenty.

Page 238.

YELLOW-BREASTED CHAT.—*Icteria virens.*

Range—Eastern United States to the Great Plains, north to Ontario and southern New England; south in winter through eastern Mexico to Northern Central America.

Nest—In briar thickets from two to five feet up, of withered leaves, dry grasses, strips of bark, lined with finer grasses.

Eggs—Three or four, white, with a glossy surface.

VOLUME I. JANUARY TO JUNE, 1897.

INDEX.

Birds, The Return of the . . . . pages 101
Bird Song . . . . " 187–8
Bird Day in the Schools . . . . " 123–124
Birds and Farmers . . . . " 213
Black Bird, Red-winged, *Agelaeus Phœniceus* . . . . . . " 64–68–69–71
Blue Bird, *Sialia Sialis* . . . . " 75–76–78–86
Bobolink, *Dolichonyx Oryzivorus* . . . . " 93–96–97
Bunting, Indigo, *Passerina Cyanea* . . . . " 172–3

Catbird, *Galeoscoptes Carolinensis* . . . . " 183–4–6
Chickadee, Black-capped, *Parus Atricapillus* . . . . . . " 164–5–7
Cock of the Rock . . . . " 19–21
Crossbill, American, *Loxia Curvirostra* . . . . " 128–130
Crow, American, *Corvus Americanus* . . . . " 90–91–94

Duck, Mandarin, *A. Galericulata* . . . . " 8–9–11

Flicker, *Colaptes Auratus* . . . . " 99–100
Fly-catcher, Scissor-tailed, *Milvulus Forficatus* . . . . . " 161–3

Gallinule, Purple, *Ionornis Martinica* . . . . " 120–1
Grebe, Pied-billed, *Podilymbus Podiceps* . . . . " 136–7–8
Grosbeak, Rose-breasted, *Habia Ludoviciana* . . . . . . " 113–115
Grouse, Ruffed, *Bonasa Umbellus* . . . . " 218–220–221
Gull, Ring-billed, *Larus Delawarensis* . . . . " 198–199

Halo, The . . . . " 150
Hawk, Marsh, *Circus Hudsonius* . . . . " 158–159
Hawk, Night, *Chordeiles Virginianus* . . . . " 175–6–8
Heron, Black-crowned, *Nycticorax Nycticorax Nævius* . . " 196–7

Jay, American Blue, *Cyanocitta Cristata* . . . . " 38–39–41
Jay, Arizona Green, *Xanthoura Luxuosa* . . . . " 146–148
Jay, Canada, *Perisoreus Canadensis* . . . . " 116–18–19

Kingfisher, American, *Ceryle Alcyon* . . . . " 60–62–63

Lark, Meadow, *Sturnella Magna* . . . . " 105–7–8
Longspur, Smith's, *Calcarius Pictus* . . . . " 125–127
Lory, Blue Mountain . . . . " 66–67
Love for Animals . . . . " 124

Mocking Bird, American, *Mimus Polyglottos* . . . . . . pages 192–193–201
Mot Mot, Mexican . . . . " 49–51

Nesting Time . . . . " 149–150
Nonpareil, *Passerina Ciris* . . . . " 1–3–15

Oriole, Baltimore, *Icterus Galbula* . . . . " 205–6–7
Oriole, Golden, *Icterus Icterus* . . . . " 34–36–37
Oriole, Orchard, *Icterus Spurius* . . . . " 154–5
Owl, Long-eared, *Asio Wilsonianus* . . . . " 109–111–112
Owl, Screech, *Megascops Asio* . . . . " 151–3–7
Owl, Snowy, *Nyctea Nivea* . . . . " 209–210–211

Paradise, Red Bird of, *Paradisea Rubra* . . . . " 22–24–25
Parrakeet, Australian . . . . " 16–18
Parrot, King . . . . " 50–56
Pheasant, Golden, *P. Pictus* . . . . " 12–13
Pheasant, Japan . . . . " 87–88

Red Bird, American, *Cardinalis Cardinalis* . . . . " 72–74
Robin, American, *Merula Migratoria* . . . . " 53–4–7–9
Roller, Swallow-tailed, Indian . . . . " 42–44

Shrike, Loggerhead, *Lanius Ludovicianus* . . . . " 202–203
Swallow, Barn, *Chelidon Erythrogaster* . . . . " 79–81

Tanager, Red-rumped, *Tanagridæ* . . . . " 30–32–33
Tanager, Scarlet, *Piranga Erythromelas* . . . . " 214–216–217
Tern, Black, *Hydrochelidon Ingra Surinamensis* . . . . " 103–104
Thrush, Brown, *Harporhynchus Rufus* . . . . " 82–83–84
Thrush, Wood, *Turdus Mustelinus* . . . . " 179–180–184
Toucan, Yellow-throated, *Ramphastos* . . . . " 26–28–29
Trogon, Resplendent, *Trogonidæ* . . . . " 4–5–7

Vireo, Yellow-throated, *Vireo Flavifrons* . . . . " 189–191

Warbler, Black-and-white Creeping, *Mniotilta Varia* . . " 222–224
Warbler, Prothonotary, *Protonotaria Citrea* . . . . . . " 168–169–171
Wax Wing, Bohemian, *Ampelis Garrulus* . . . . " 140–141
Woodpecker, California, *Melanerpes Formicivorus Bairdi* . . " 131–133–134
Woodpecker, Red-headed, *Melanerpes Erythrocephalus* . . " 45–46–47
Wren, Long-billed Marsh, *Cistothorus Palustris* . . . . . " 142–143–145

VOLUME II. JULY TO DECEMBER, 1897.

INDEX.

Anhinga, or Snake Bird, *Anhinga Anhinga* . . . . pages 26–27
Avocet, American, *Recurvirostra Americana* . . . . " 14–15
Audubon, John James . . . . " 161

Birds of Bethlehem . . . . " 223
Bird Song . . . . " 1–41–81
Birds in Captivity . . . . " 121
Birds of Passage . . . . " 173
Bird Miscellany . . . . " 195–235
Blue Bird, Mountain, *Sialia arctica* . . . . " 203–205
Bunting, Lazuli, *Passerina amoena* . . . . " 196–198–199

Chimney Swift, *Chætura pelagica* . . . . " 131–133
Captive's Escape . . . . " 116
Chat, Yellow-Breasted, *Icteria virens* . . . . " 236–238–239
Cuckoo, Yellow-Billed, *Coccyzus americanus* . . . . " 94–95
Dove, Mourning, *Zenaidura macrura* . . . . " 111–112–113
Duck, Canvas-back, *Athya valisneria* . . . . " 18–20
Duck, Mallard, *Anas boschas* . . . . " 10–11–13
Duck, Wood, *Aix Sponsa* . . . . " 21–23–24

Eagle, Baldheaded, *Haliætus lencocephalus* . . . . " 2–3–5
Flamingo, *Phænicopterus ruber* . . . . " 218–221
Flycatcher, Vermillion, *Pyrocephalus rubineus mexicanus* . . " 192–193

Gold Finch, American, *Spinus tristis* . . . . " 128–129–130
Goose, White-fronted, *Anser albifrons gambeli* . . . . . . " 166–168–169
Grackle, Bronzed, *Quiscalus quiscula* . . . . " 228–230–231
Grosbeak, Evening, *Cocothraustes vespertina* . . . . " 68–70–71
Grouse, Black, *Tetrao tetrix* . . . . " 217–220–223

Heron, Snowy, *Ardea candidissima* . . . . " 38–39
How the Birds Secured Their Rights. . . . . " 115
Humming Bird, Allen's *Selasphorus alleni* . . . . " 210–211
Humming Bird, Ruby-Throated, *Trochilus colubris* . . . . . " 97–100–103

Junco, Slate Colored, *Junco hyemalis* . . . . " 153–155

Kingbird, *Tyrannus tyrannus* . . . . " 156–158–159
Kingfisher, European, *Alcedo ispida* . . . . " 188–190–191
Kinglet, Ruby-crowned, *Regulus calendula* . . . . " 108–110
Lark, Horned, *Otocoris alpestris* . . . . " 134–135
Lost Mate . . . . " 126

Merganser, Red-Breasted, *Merganser serrator*. . . . . pages 54–55
Nuthatch, White-Breasted, *Sitta carolinensis* . . . . " 118–119

Old Abe . . . . " 35
Ornithological Congress . . . . " 201
Osprey, American, *Pandion paliætus carolinenses* . . . . . . " 42–43–45

Partridge, Gambel's, *Callipepla gambeli* . . . . " 78–79
Phalarope, Wilson's, *Phalaropus tricolor* . . . . " 66–67
Pheasant, Ringnecked, *Phasianus torquatus* . . . . " 232–233
Phœbe, *Sayornis phœbe* . . . . " 106–107
Plover, Belted Piping, *Aegialitis meloda circumcincta* . . . . " 174–175
Plover, Semipalmated Ring, *Aegialitis semi-polmata* . . . . " 6–8–9

Rail, Sora, *Porzana Carolina* . . . . " 46–48–49

Sapsucker, Yellow-bellied, *Sphyrapicus varius* . . . . " 137–140–143
Scoter, American, *Oidemia deglandi* . . . . " 32–33
Skylark, *Alauda arvensis* . . . . " 61–63–64
Snake Bird, (Anhinga) *Anhinga anhinga* . . . . " 26–27
Snowflake, *Plectrophenax nivalis* . . . . " 150–151–152
Sparrow, English, *Passer domesticus* . . . . " 206–208–209
Sparrow, Song, *Melospiza fasciata* . . . . " 90–91–93
Summaries. . . . . " 40–80–120–160–200–240

Tanager, Summer, *Piranga rubra* . . . . " 163–165
Teal, Green winged, *Anas carolinensis* . . . . " 213–214–215
The Bird's Story. . . . . " 224
Thrush, Hermit, *Turdus Aonalaschkae* . . . . " 86–88–89
To a Water Fowl . . . . " 76
Tropic Bird, Yellow-billed, *Phaethon flavirostris* . . . . " 184–186–187
Turkey, Wild, *Meleagris gallopava* . . . . " 177–180–183
Turnstone, *Arenaria interpres* . . . . " 170–171

Verdin, *Auriparus flaviceps* . . . . " 226–227
Vireo, Warbling, *Vireo gilvus* . . . . " 138–141
Vulture, Turkey, *Catharista Atrata* . . . . " 72–73–75

Warbler, Blackburnian, *Dendroica blackburnia* . . . . " 123–125
Warbler, Cerulean, *Dendrœca caerulea* . . . . " 178–181
Warbler, Kentucky, *Geothlypis formosa* . . . . " 50–51–53
Warbler, Yellow, *Dendroica æstiva* . . . . " 83–85
Woodcock, American, *Philohela minor* . . . . " 28–30–31
Wren, House, *Troglodytes ædon* . . . . " 98–101–104
Wood Pewee, *Contopus Virens* . . . . " 144–146–147–148

Yellow Legs, *Totanus flavipes*. . . . . " 58–60

QL681
.B57
1897
v.1-2

Birds and natu

Date Loaned	Borrower's
12 21 9	GLICK BINDERY

100109488